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FIRE ENGINEERING

A Consolidation of
FIRE AND WATER ENGINEERING *and* THE FIRE ENGINEER

MAY 10, 1926

EUREKA
FIRE HOSE

Just a Word on Fire Hose—

Safety of life and property depends upon the effective functioning of your department.

No fire department can be more dependable than the hose on its fire-lines. The purchase of inferior hose is indeed a dangerous economy.

GOOD hose—like Paragon or one of the other famous brands of Eureka manufacture—can be counted on for unfailing, dependable service long after the *cheap* hose has been discarded.

"Standardize on Eureka!"

Eureka Fire Hose Manufacturing Company
50 CHURCH STREET, NEW YORK CITY
ATLANTA BOSTON CHICAGO COLUMBUS DALLAS DENVER DETROIT KANSAS CITY
LOS ANGELES MINNEAPOLIS NEW YORK PHILADELPHIA SEATTLE SYRACUSE

The Journal of the Fire Protection Profession Since 1877

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FIRE ENGINEERING

A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER

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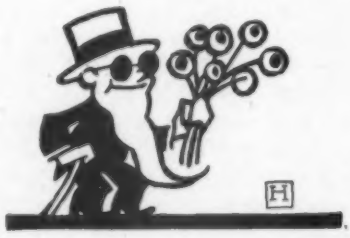

Say It With Flowers

YES, sir, it makes all the difference in the world how you say things and how you do things and what attitude you take toward those with whom you come in contact in your daily work.

¶ When we read the following story in the paper the other day, we realized more than ever the value of diplomacy:

You Said It, Pa.

"Pa, what does it mean here by diplomatic phraseology?"

"My son, it's like this: If you tell a girl that time stands still while you gaze into her eyes, that's diplomacy; but if you tell her that her face would stop a clock, you're in for it."

¶ FIRE ENGINEERING passes on to its readers, therefore, the thought which the florists have so well embodied in their slogan, "Say it with flowers." You will not only get lots further, if you do; but you will enjoy the journey all the more.

The Publishers

CONTENTS

MAY 10, 1926

VOL. LXXIX No. 9

Two Big Chicago Fires Cause Million Loss (Illustrated) 447
Two Fires in Semi-Mill Type of Buildings with Conditions of Unusual Similarity.

Fire Alarm Signal Engineering, by E. W. Kierstead, E. E. (Illustrated) 449
Location, Installation and Maintenance of Overhead Circuits.

Determine Travel of Fire Before Operating (Illustrated) 451
Failure to Head Off Extension Responsible for Large Losses—Know the Size of Your Fire at the Start.

The University of Illinois Course of Instruction in Fire Protection (Illustrated) 453
Mechanical Installations, (continued) by Raymond T. Nelson.

With the Editor 455
Comments on Current Events and Live Topics by our Editorial Staff.

Questions and Answers 457
Replies to Questions on all Manner of Subjects of Fire Fighting and Fire Protection.

Recent Important Fires Specially Reported (Illustrated) 459
Large Fires in Boston and New York City—Burnings of Two Weeks.

Recent Patents (Illustrated) 464
Description of Patented Inventions of Interest to Fire Department Officials.

Volunteer Fire Department (Illustrated) 467
Matters of Interest to Volunteer Firemen.

Industrial Plant Protection (Illustrated) 471
Fire-Fighting Methods in a Plant Brigade.

False Alarms 475
The Humorous Side of the Fire Protection Profession

Fire Department Activities 476
Newsy Notes from All Over the Country, with Matters Firemanic.

Fire Alarm Notes 476
News of the Activities of Fire Alarm Division of the Fire Department.

Fire Department Improvements 479
Record of Business Activities in the Fire Protection Field.

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Entered as second class matter at the Post Office, Albany, N. Y., January 29, 1926 under the Act of March 3, 1879.

Of Course there's No Mistaking AHRENS-FOX Apparatus!

This Graphic Drawing is being used in the national fire prevention advertising of Johns-Manville, Inc., and is furnished to FIRE ENGINEERING through their courtesy.

AHRENS-FOX performance stands out from the ordinary run of fire apparatus just as the distinctive "fighting face" of the Ahrens-Fox pumper makes it readily recognizable wherever it is seen.

Outstanding character is an invariable attribute of Ahrens-Fox apparatus!

The Ahrens-Fox Fire Engine Co.

"Builders of Quality Fire Apparatus"

Cincinnati, Ohio

Eastern Representative
J. A. PRESCOTT
Fisk Bldg., New York

New England Representatives
CARLOW AUTO CO.,
Taunton, Mass.

Chicago Representative
HENRY R. EARLY
Planters Hotel, Chicago, Ill.

California Representatives, PACIFIC FIRE EXTINGUISHER CO., San Francisco, Cal.
Western Central Representative, J. G. MATHENY, 3418 Central St., Kansas City, Mo.
Minneapolis Representatives, JOS. F. AUEL Company, 718 Builders' Exchange Bldg., Minneapolis, Minn.
Canadian Representatives, THE BICKLE FIRE ENGINE CO., Woodstock, Ontario

Simplified Signalling

The first requisite of a good fire alarm system is simplicity of construction and operation. Fire and police chiefs—both city and industrial—are getting away from complicated systems which require constant watching and adjusting to make them signal properly.

So simplicity has been made the first outstanding feature of GARL Fire Alarm and Police Signal Systems.

In addition to simplicity of construction, which means low first cost and insignificant upkeep expense, GARL SIGNAL SYSTEMS have the following advantages:

Absolutely non-corrosive, failure-proof mercury contacts. Always gives signal and gives it right.

Telephone connection with headquarters from every signal box eliminates difficulties of telegraph systems. Telegraph connection can be had when desired.

No complications in cross-signals. Two boxes pulled on same circuit easily located.

Modern GARL Systems are backed by over 30 years experience in designing and building alarm, signal and telephone systems. They have been giving highly satisfactory service in a number of cities and in some of the largest industrial plants of the country.

The present GARL organization is strongly financed with an experienced engineering department ready and able to fit GARL Systems to any city or industrial requirement.

Investigate GARL Signal Systems before you buy. Include us in your requests for Bids.

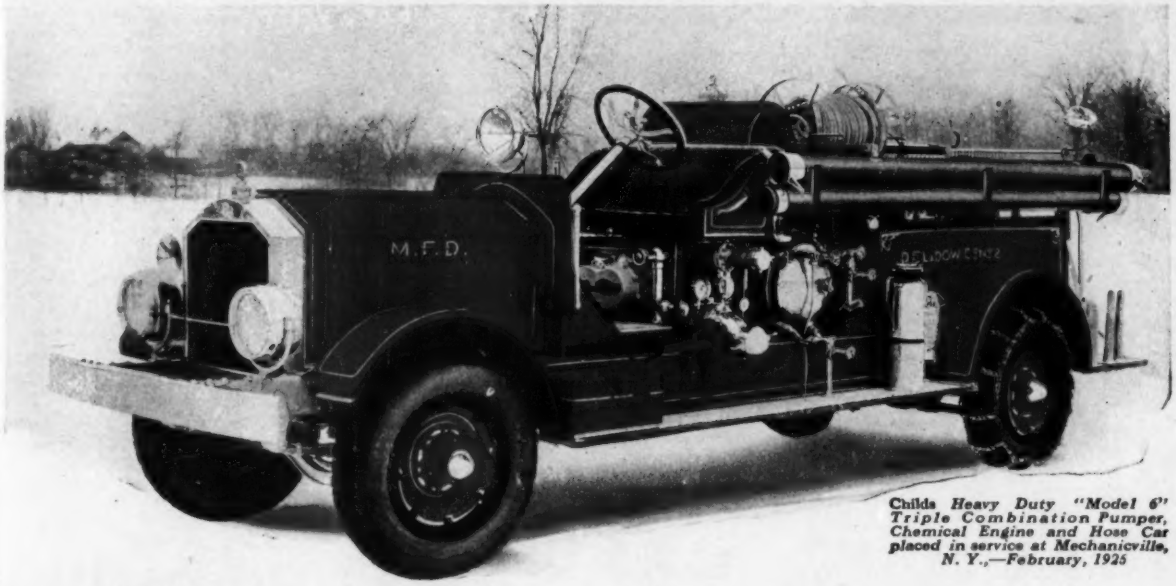
GARL SIGNAL boxes are of attractive design and distinctly storm-proof

Note the simplicity of internal construction. Nothing to get out of order or to confuse the layman.

THE GARL SIGNAL COMPANY

Akron, Ohio

A RELIABLE FIRE ALARM SYSTEM MEANS LOWER FIRE LOSSES



Childs *Heavy Duty "Model 6" Triple Combination Pumper, Chemical Engine and Hose Car placed in service at Mechanicville, N. Y.,—February, 1925*

Serving one of the 500 . . .

THE town of Mechanicville, N. Y., is one of more than 500 municipalities protected by *Childs* Motor Fire Apparatus. Above is shown the newest addition to this town's equipment.

Reports from many Fire Departments indicate complete satisfaction with the new *Childs* Standard Heavy Duty Apparatus—a complete line designed and powered for strenuous service, yet within reach of any municipal budget.

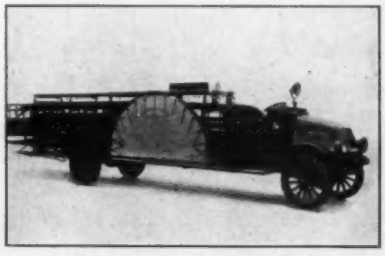
All types and combinations of apparatus are available in this new line.

Over seven hundred Departments are depending on genuine Firefoam, ejected from *Foamite* Extinguishers, to control incipient blazes of inflammable liquids, paint, grease, etc. In a growing number of cities, fire trucks are also equipped with *Foamite* 40-gallon chemical tanks in place of the familiar but less effective soda-acid tanks.

Not only does Firefoam kill fires that are difficult or impossible to handle otherwise, but it smothers out ordinary fires as well—and causes far less damage than water or liquid chemicals.

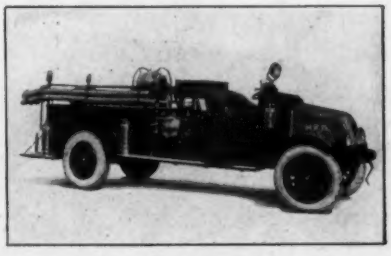
Write for illustrated catalogues that give specifications and prices of *Childs* Motor Apparatus and *Foamite* equipment.

FOAMITE-CHILDS CORPORATION
Fire Protection Engineers and Manufacturers
137 Turner Street, Utica, N. Y.
Sales and Engineering Representatives in all leading cities



At right: Childs *Triple Combination Equipment on International Harvester 3 Ton Chassis, placed in service at Mechanicville in 1922*

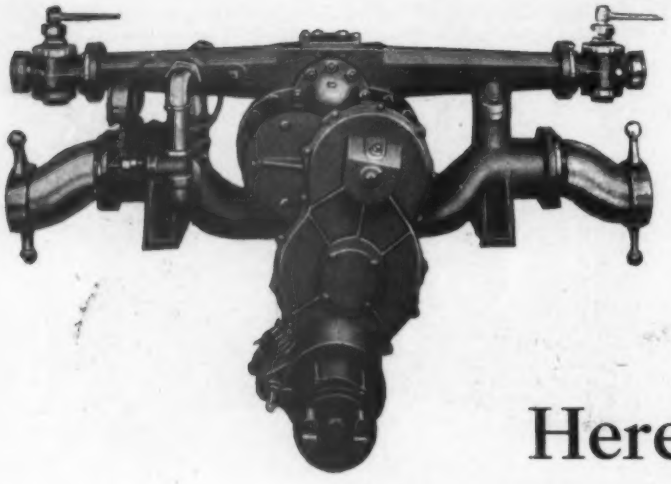
At left: Childs *Hook and Ladder Equipment on International Harvester 3 Ton Chassis, placed in service at Mechanicville in 1922*



Foamite-Childs Protection

A Complete Engineering Service

Against Fire



Here's A Fact That IS Interesting

A FACT from The Records

IN the list of official tests conducted by the Fire Underwriters it appears that up to Feb. First, 1926, forty-seven NORTHERN ROTARY PUMPS have successfully passed the twelve-hour test.

This number is more than double the number of all other rotary pumps and more than three times the number of any other rotary pump to pass the twelve-hour test.

This is another evidence of the supremacy of NORTHERN PUMPS in the fire-fighting field.

Before you buy any fire pump you owe it to yourself to know all about the NORTHERN. Write for bulletins — they are worth having even if they are free.

NORTHERN FIRE APPARATUS CO.

902—18th Ave., N. E.
Minneapolis, Minnesota

ROTARY NORTHERN PUMPS

Every Fire Department needs this greatest of all weapons for fighting oil fires—

This shows the Amdyco Foam Generator and how easily it can be handled. Weighing less than 150 lbs. with all attachments, it can be carried as part of your regular pumper equipment.

How Amdyco powder is fed into the Generator. Water comes in one line, mixes with the powder, and goes out the other line as a foam stream. Hooking up the generator is just as simple as adding another length of hose.

AMDYCO
FOAM POWDER
used with the new Amdyco
FOAM GENERATOR

FOAM is unquestionably best for putting out oil, gasoline and other flammable liquid fires—but the best foam in the most practical form for effective "fool-proof" fire fighting now comes to you in the AMDYCO method. These are facts proven by actual performance at fires, as well as numerous exacting tests conducted under direction of well-known fire authorities.

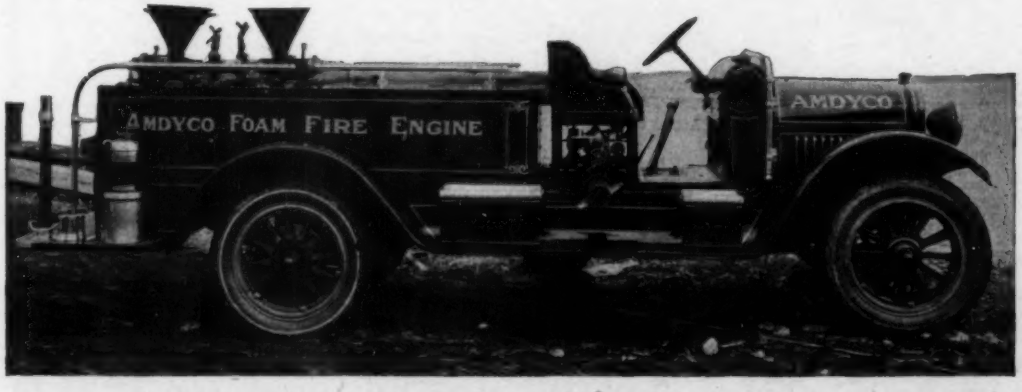
When foam is needed at a fire, the Amdyco Foam Powder used with the Amdyco Generator, makes it possible in a few minutes to convert any of your water streams into foam streams, without any other special equipment. You no longer have to contend with the limitations and uncertainties of carrying bulky "prepared" foam.

Your city or town, no matter how large or small, needs the security against dangerous liquid fires that only the AMDYCO method can give. And best of all you can get the complete outfit at surprisingly small cost. Better write today for full particulars.

AMDYCO CORPORATION

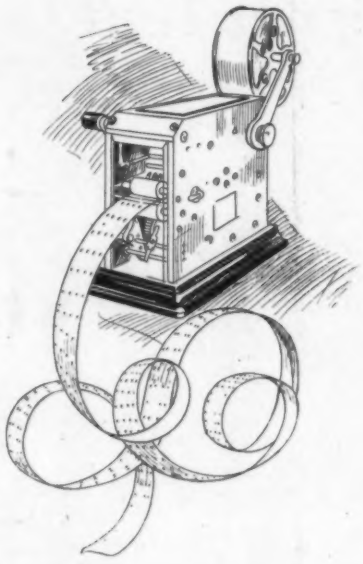
"Better Foam in Better Form"

100 E. 42nd St., NEW YORK



THIS PHOTO shows a specially designed Amdyco Foam Pumper, fully equipped, for use where unusual hazards exist. The same pump can handle water streams as well as foam.

A little journey through the GAMEWELL FACTORY



Paper, Porcelain, Punching and Platinum

Five thousand different types of raw materials are used from time to time in making fire and police signaling apparatus. If the raw material is not right, the finished product will not be right. To make certain that the apparatus will be dependable — that good labor will not be wasted on poor material — all raw materials are checked as to accuracy, strength and characteristics before they are put into stock.

Samples of magnet steel, for example, are sent through the regular manufacturing processes, made into magnet shapes, magnetized by an electro-magnet and then tested against a standard magnet. Slate for switchboards is tested for metallic veins that might give trouble after the board has been put in service.

Hundreds of Gamewell parts are accurate to one-thousandth of an inch — the thickness of tissue paper. Many are accurate to one ten-thousandth and the raw material must be correspondingly accurate. Main springs, rod stock or drill rod must keep within the limits of one-thousandth or back it goes.

Iron castings are tested for fineness of texture. If they are too brittle they may break when struck with a sharp blow after they are on the streets. Register paper is tested in a register which runs steadily and gives in one day, the equivalent of years of ordinary service. If there is fuzz, if a clay filler has been used which would clog the registers, that too means rejection.

Careful inspection of raw materials is one of the reasons why Gamewell apparatus does give such splendid service.

$500.00 Firemen's Relief Contest

Remember, there is a chance for you to make $250.00 or $500.00 for your Firemen's Relief Fund. If you have not seen the details write for bulletin.

The Gamewell Company

Newton Upper Falls, Mass.

"A Box A Block"

FIRE ENGINEERING

(A Consolidation of FIRE AND WATER ENGINEERING and THE FIRE ENGINEER)

The Leading Journal of the Fire Protection Profession

VOLUME LXXIX MAY 10, 1926 NUMBER 9

Two Big Chicago Fires Cause a Million Loss

Unusual Similarity of Conditions at These Fires, Only Four Days Apart—Both in Semi-Mill Type Buildings

THE fire department of Chicago, Ill., was called upon to fight two severe fires within four days of each other, the conditions of which were of unusual similarity. In both cases the buildings involved were eight stories in height, of semi-mill construction, and equipped with automatic sprinklers.

In the first instance the blaze occurred on March 9, at 7:43 p. m., in the building at 224-32 N. Halstead Street, the origin being on the second floor in the premises occupied by Block Portilier Company, makers of floor lamps and shades, commencing with an explosion. Eight alarms were sent in, there being some 400 members of the Chicago Fire Department, under command of Chief Arthur R. Seyferlich in service.

Unprotected Vertical Openings Increase Task

The task of the fire department was greatly increased in fighting this fire by the number of vertical openings, all unprotected, in the building and the great quantity of inflammable materials involved. When the first alarm companies, consisting of four engines and two hook and ladders, arrived the entire structure was blazing on all floors. The first alarm was following by a 4-11 alarm and six special calls.

Obsolete Sprinkler System Not Working

The building was said to have been equipped with an obsolete two-source sprinkler system, installed in 1892 and 1896. This system, it is asserted, was shut off in the building on fire, and the tanks drained, due to the freezing and rupturing of piping of the tank-filling line on the day before. The system control valves, it is claimed, were discovered to be shut after the fire and also the section control valve on underground line between the building involved and the adjoining one.

One employee of the company in whose building the fire occurred was burned to death, not having time to escape from the onrush of the flames, and two others were quite badly injured.

Apparatus in Service

The fire apparatus consisted largely of combination pumpers, there being 42 of such engines in service, consisting of 750-gal. Seagrave and Ahrens-Fox, a few 500-gal. Mack and some 4-cyl. Ahrens-Fox cars. There were two water towers also employed in fighting the blaze. The hydrants, of which there were an abundant supply, consisted of double 2½, 3½, 4 and 4½-inch. Comparatively few single streams were employed in fighting this fire, the firemen using water tower, turret-pipe and 3-way siamese in their work. The water towers were equipped with two turret pipes each. The tips used by the water tower masts and turret pipes were 2-inch, and those of the siamese, 1¾ and 2 inch.

The hose consisted of 2½-inch, with some 3-inch, with 2½-inch couplings, and some 3½-inch. Most of the companies went into siamese on arrival at the fire.

Carry Two and Three Inch Hose

Many of the Chicago companies now carry 500 feet of 2½-inch hose and 500 feet of 3-inch hose, it being figured that the latter eliminated excessive friction loss when long lines of hose are used, as in the present instance, with 42 pumpers assembled in so constricted a territory. Thus, with the siamesing of streams, heavy volumes of water can be obtained in fighting a large fire.

Ruins of Eight Story Semi-Mill Type Building Destroyed in Chicago Fire at South Canal Street.

The loss on the building 224-32 N. Halsted Street was total, with heavy damage by water and smoke to the adjoining structures.

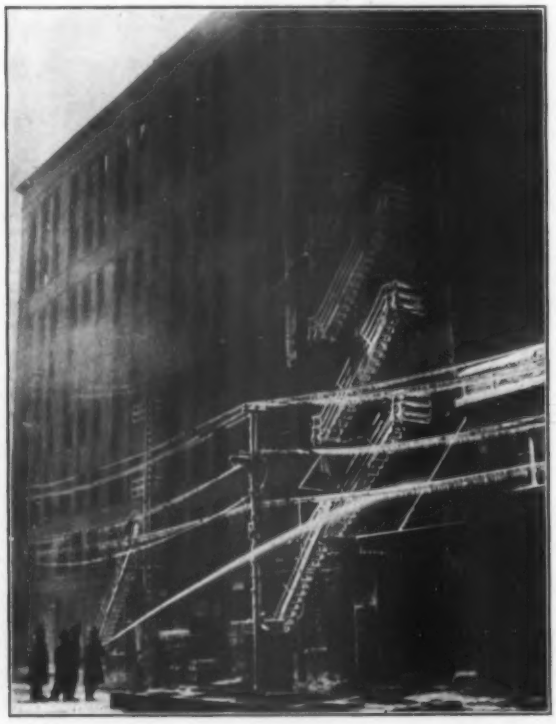
Similarity of Second Big Fire

The second fire, which had so many features in common with the one just described, occurred on March 13, at 6:21 p.m., in the toy wagon shop and oil mop establishmen of J. A. Meinhardt & Co., at 848-50 South Canal Street, and necessitated seven alarms. In this instance the fire, it is thought, originated on the seventh floor,

used for yarn storage and treating, and toy wagon stenciling and packing. The cause was unknown.

Two Theories as to Sprinklers

From the evidence obtainable, it is asserted that the sprinklers operated, but failed to hold the fire, owing, according to one theory, to the fact that the fire first opened heads remote from the blaze, which drained the system before the fire was entirely extinguished, or according to the second theory, some of the branch lines becoming ice bound, delayed water until too many heads became involved. In the former theory, it is pointed out that the sixth floor was used for storage yarn, yarn treated with mineral oil and the packing and storage of toy wagons in cartons. If the fire originated in a pile of mops or boxed wagons, with certain peculiar draft conditions existing in the building, the fused heads may have been unable to reach the seat of the blaze until



Big Chicago Fire in Eight Story Semi-Mill Type Building, in Which One Life was Lost and Two Other Employees Were Badly Injured.

too late to do any good. In the case of the second theory it is pointed out that the building involved stands alone, exposed on all sides, that the radiation was not excessive, as an additional heater had to be installed to heat the gravity tank in order to prevent freezing, that small lines can freeze and be thawed without bursting, and that the upper floors of this building were used largely for storage purposes.

Companies Forced by Intense Heat to Retire

The building in which this fire originated was about one mile south and half a mile west of the center of the city, and was situated only a few blocks from the spot where Mrs. O'Leary's Cow upset the famous lantern in 1871.

The first companies to arrive, in answer to an alarm from Box 297 at 6:21 p. m., found the fire burning fiercely on the seventh and eighth floors. One of these units managed to reach the third floor, but by this time the sixth had become involved and the intense heat forced them to retreat. The members saw water coming down the stairs from the sprinklers. Thereafter siamese connections to the sprinklers were used and were effective in holding the fire to these floors. The others were however badly damaged by water.

Apparatus Which Handled this Fire

About 300 men were employed at this fire, with 35 motor pumpers, consisting of 750-gal. Seagrave, and Ahrens-Fox, with a few 500-gal. Mack cars. There were plenty of double hydrants available of 2½, 3½, 4, and 4½ inch, about 150 feet apart, with pressure of about 15 pounds. About 30 engine streams were thrown, with nozzles of 1¼-inch, with 2-inch tips on two Seagrave water towers in use. The hose in use was 2½ and 3 inch, the latter with 2½-inch coupling, and 3½-inch to tower.

The loss on the first fire was total, with a valuation of about $700,000 or $800,000. The second fire was not so heavy in loss, possibly $200,000 on a valuation of about $700,000.

Box 52 Association Meets

The Box 52 Association, of Boston, Mass., gave an entertainment and buffet supper at the Hotel Westminster on the evening of April 22. An illustrated talk entitled "Inside the Lines" was given by Alton H. Blackinton, staff photographer of the Boston Herald. President William F. Lehman acted as master of ceremonies and was assisted by Secretary Harry J. Rockett. Among the guests were Chief Daniel F. Sennott, Assistant Chief Henry A. Fox, and Deputy Chief Albert J. Caulfield, of the Boston Fire Department; Chief James M. Casey, of Cambridge; Chief W. H. Hill, of Belmont; Deputy Chief Wait, of Cambridge; Chief Harry Holmes, of Milton; Chief W. H. Mahoney, of Peabody; Ex-Chief Murray, of Morris Cove, Conn.; Supt. Henry Thompson, of the Boston Protective Department; and Supt. George L. Fickett, of the Boston Fire Alarm Office.

H. BELKNAP

Fireman Sues Concern for Injuries at Fire

On the May calendar of cases for trial in the New York Supreme Court is the complaint of Fireman Edward J. Chapman, against the Manufacturer's Transit Company, Inc., for $5,000 for personal injuries sustained at the big fire in the Jane Street warehouse in July, 1922, where Lieut. John Schoppmeyer of Engine Co. 13 was killed and several others were injured, due to an explosion within the building.

Fireman Chapman, through his attorney, former Battalion Chief, Luke J. Flanagan, who was the first chief officer of the department to arrive and take command at the fire in question, charges that the Manufacturer's Transit Company, in violation of law, had stored in the warehouse magnesium powder in such quantities, as to cause the explosion, wrecking parts of the building and injuring members of the fire department.

Chapman, at that time was a member of H. & L. Co. 3 and was operating a water tower in front of the building. He alleges that as a result of the blast of magnesium powder, hot and poisonous gases caused him to fall, sustaining painful injuries from which he never fully recovered. He is now a member of H. & L. Co. 27, on East 176th street.

He charges that he breathed the hot and poisonous gases and that, since the occurrence his lungs have been affected, his eyes damaged and his respiratory organs injured and impaired.

By reason of the aforesaid injuries, Chapman avers, his nervous system has been shocked, his spine violently sprained and he believes and has been so advised that he will never fully recover, but will suffer as long as he lives.

He charges that by reason of the wrongful, unlawful, reckless and negligent conduct of the warehouse company, he has been permanently and painfully injured.

This is one several suits pending against the Manufacturer's Transit Company, as a result of the so-called Jane street warehouse fire, but it is the first one to come to trial.

The defendant company denies the allegations set forth in the complaint.

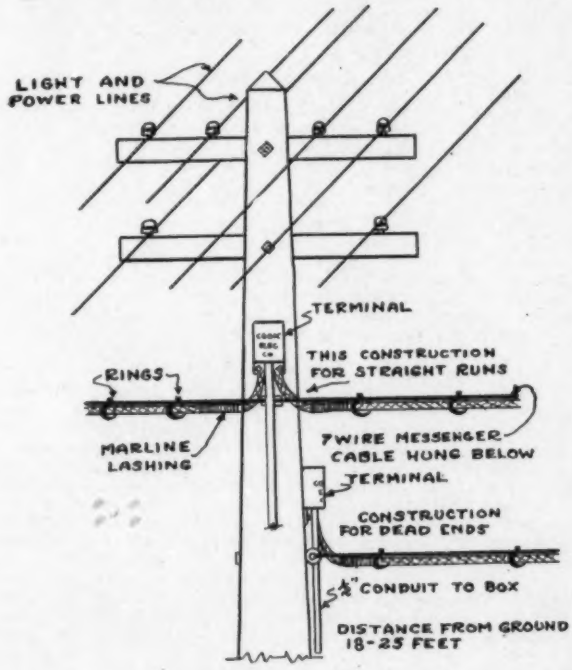
Modern Fire Alarm Signalling

First Installment of a Series of Articles on the Subject to Appear in This Journal—Location, Installation and Maintenance of Overhead Circuits

By E. E. KEIRSTEAD, E. E.

THE purpose of these articles is to give to the men entrusted with the care of Municipal Fire Alarm Systems, a thorough working knowledge of the different types of apparatus, and the installation and care of them in service.

The Fire Alarm Signal Service has grown so fast, that it is practically impossible for one to know all there is to know about it. The author of these articles is actively engaged in the Engineering end of the profession and while not claiming to know all there is to know about it, he is well grounded in construction, maintenance, design and repair of Municipal Systems.



SKETCH #1

The articles are intended to give you a good working knowledge of the work and will take up in the order named the following: Line Construction, Alarm Boxes, Batteries, Generators, Switchboards, Repeaters, etc., until every phase of the work is covered.

The author will answer your questions, and help you with your problems. The only requirement is that you send your questions to Fire Alarm Department, care of FIRE ENGINEERING *and enclose a self addressed stamped envelope for reply. No charge is made for this service.*

Location, Installation and Maintenance of Overhead Circuits

Location: The location of the Fire Alarm circuit wires or cables on outside overhead construction depends a great deal upon the requirements of the local, Light and Telephone companies of the city in which the work is to be done, as these companies as a rule own the poles on which your circuits will be run. In addition to the right of way which is necessary for you to secure before any work is done, it will be of value to have the Engineers of these companies go over your proposed layouts, so as to avoid any future changes which otherwise may be necessary to conform with their rules.

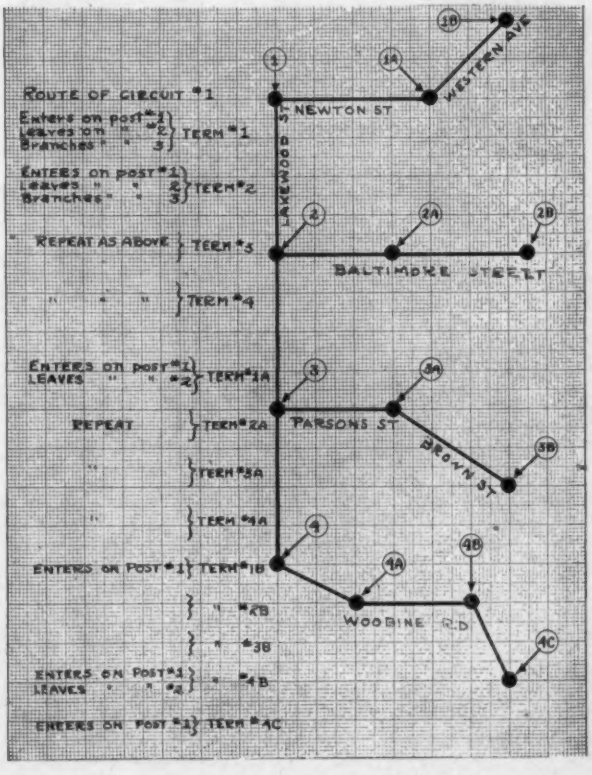
If you can allow them to place your circuits below all other existing lines you are fortunate as practice has shown that it is (best). However, do not place them so low that in event an unusually heavy sleet storm should visit you, the resultant sag will lower the cable or wires far enough to catch in the highly loaded motor trucks, etc.

The location of fire alarm circuits at a corner of junction pole is a very important matter in that they will have to be so placed as to easily disconnected for the removal of pole, extension of service, rerouting of circuits etc. At points where new streets are to be cut through it will be a good idea to leave a coil of messenger wire and cable long enough to be able to make dead end connections and erect a terminal box for extension to new street, these matters will have to be worked out in the field as any nuumber of conditions have to be taken into consideration. The location of all circuits should be well worked out before erection in order to avoid numerous changes afterwards.

Installation

If a new line installation is to be made, the best results will be obtained by the use of loom cable which is furnished in a great many number of conductors or pairs, ranging from 2 to 60 pairs. This cable is carried suspended from a 7 strand galvanized messenger wire by rings which are either clamped or snapped into place. In using messenger wire, it is best practice to use a through bolt and cable clamps and on dead ends, an eye bolt and thimble is used, the wire being passed through and held by two cable clamps placed about one inch beyond eye bolt. See sketch No. 1 for construction.

The poles should be measured and marked the decided distance from the ground and bored for the through or eye bolt. The



Sketch No. 2

clamps are put on the bolt and the bolt passed through the hole in pole and tightened up enough to keep the clamp in position. The messenger wire should be run through the clamps the entire run to the dead end. It should be clamped up secure and cut off clean. The other end may now be pulled up and the clamps tightened up on all the poles but the one where it is to be

dead ended again. You can now attach your wire grips about 5 to 6 feet from the pole. The slack can be pulled up and the dead end made as above. Your wire grips can be let off and taken down. Your carrier cable is then ready to receive the cable.

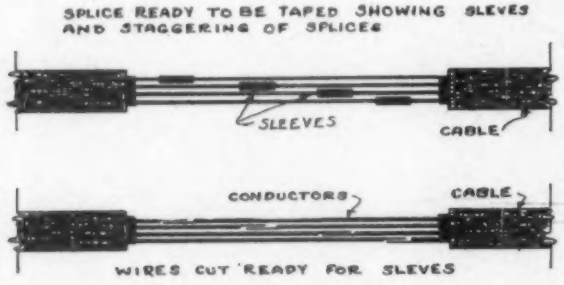
Proper Way of Running Cable

There is only one good way of running the cable in, and that is to run the cable on the ground the entire length where it is possible to do so, in crossing streets or other wires it will be necessary to put on a few rings to hold cable up aloft. After cable is run entire length of run allow about 2 to 3 feet over for run to cable box or can. This end is now carried aloft and lashed with a heavy marline twine as shown in sketch No. 1. Put on a few rings on the first section, and go back to cable reel and pull up on the cable as much as possible and stop it off.

This will relieve the strain and it will be easier to install the rings. Put on the rings all the way back to the end. The strain can then be released and 2 or 3 feet cut off to run to cable can or box. It is necessary to lash the cable with marline again as above. If it is desired to break the cable on a straight run to supply a box along the line, run as for above until you reach the pole where you wish to break cable. Lash the end from where you have already secured cable, release strain on the cable and pull back on bight of 5 or 6 feet and lash cable on other side of pole. The bight can now be cut in the center and the work carried on as before.

Rings should be placed about 15 inches apart to keep cable straight.

The next step is the installation of the terminal box or can which is made up with the required number of terminal strips, and should be ordered drilled for the proper number of holes



SKETCH # 3

for cable and box conduits. The installation of the terminal is shown on sketch No. 1.

Keep Cable Charts

When installing cable terminals, keep a chart of their location and try to keep pairs running in numbered order to avoid confusion later on. Sketch No. 2 shows a good way of keeping circuit terminal charts and will aid you in keeping account of your work.

Another good cable construction is obtained by the use of pole brackets and saddle back glasses, the cable being carried in the groove in the glasses and lashed with marline. This type of construction is not recommended on lines where poles are over 100 feet apart as a great amount of sagging will result.

It is not necessary to go into detail concerning open wire construction as it is possible to see its construction in any city in the country, and furthermore it is very simple to install.

By all means learn all you can about line construction, it is the arm of your system.

Where box loops run inside of buildings such as schools, factories, etc., the whole installation from where it enters the building must be in rigid iron conduit and should be painted signal red in order to easily follow and trace it through the building. If the sprinkler system is painted red a distinction can be made by painting white boards around the fire alarm circuit conduit , every 3 or 4 feet apart. It should be possible to test loops entering buildings, easily from the outside. All cross arms, terminal boxes, cans and brackets should be painted signal red or white so as to enable a man to easily follow the circuits. Use only first class linemen and be on the ground with them if you desire to have a good installation.

Maintenance

When your lines or cables are up and in working order your duty will not be at an end, as constant care is needed to keep your lines in first class condition. It will be necessary to go over your lines once each month to locate broken glasses where open wire or saddle-back glasses are used. Where circular loom cable is used trouble will be greatly reduced as there are rarely opens or grounds, etc. Relative to grounds, on all lines or cables which pass through trees or iron poles, or high tension lines, wood moulding should be attached to keep the wire or cable from coming in contact with it. Where this is not done you are bound to have trouble. Do not use bare wire for tie wires on iron brackets or pins because if the tie wire should cut through the line wire and the glass should break you are very apt to have a heavy ground on your line.

All continuity tests should be made while wires or cables are under strain, as it sometimes happens that a wire may be broken and still maintain contact being held in place by the insulation alone. When testing lines which have been up for some time, it would be a good idea to shake the wire or cable at every pole, as it is possible the wires may be broken inside the insulation by severe tension, such as encountered during a heavy storm, and in this way you can locate what will be a swinging open line later on. There is nothing so hard to locate as a swinging open line.

Locating Open Circuits

How to locate open circuits will now be described. When a circuit is open and you know for sure it is outside on the circuits, leave a man in the office and instruct him to throw in resistance in the line by means of a rheostat on the board for that purpose.

Proceed to first box on that circuit and place a jumper on or directly across the line on the far side, but leave the box in the circuit. If the bell armature fails to pick up, your line is open running back to the office, and it will be necessary for you to test that pair at each terminal box all the way back to the one nearest the office. You can do this by placing a voltmeter directly across the line. When you receive a reading, ground one side of the line running to the terminal at which you made your last test.

If you now receive a reading your line is open between these two points. If not, change your ground to the other side and you will receive a reading denoting that side is open. If it is circular loom cable you will be obliged to replace with a new piece, but if it is open wire you will be able to splice it out.

If you do see or hear the bell armature pick up at the first box, proceed along making a test at each box until your armature fails to attract. You will then know that your open is between your last and next to last test. Repeat the instructions given above for finding its location. It will be necessary for you to throw the open circuit out of the repeater while you are locating break or you will send in stray blows each time you close the line at a box. How to locate grounds and crosses will be taken up in an article on protector boards, as this board plays a most important part in their location.

Inspection of Terminal Boxes

Terminal boxes should be inspected for dampness and corrosion, etc., periodically, and special note should be taken of all low hanging wires and reported to the proper companies for attention. Do not try to splice loom cable, but where absolutely necessary to do so, the following should be done: Have your splices staggered as shown in sketch No 3 and do not splice where it will be under tension, such as the center of the sag, etc. Wrap each spliced conductor with two layers of rubber tape and two layers of friction tape. Wrap entire splice with two layers of friction tape and two layers of water-proof tape. Hold lighted match or blowtorch under splice until tar runs and seals splice.

Remember it is the little things which cause trouble, and well maintained circuits give very little trouble. It will be well to send for a copy of the National Board of Fire Underwriters rules for the installation, maintenance and use of municipal fire alarm systems.

A few practical don'ts:

Don't place wires on rotten or broken poles.

Don't run cables on same arms with high tension lines.

Don't leave splices untaped.

Don't take up all the space on the pole; leave room for linemen to work.

Don't forget to ground messenger wire and conduits.

Don't test for open and grounded lines with 110 volts.

The next article will deal with Alarm Boxes, i.e. Location, Installation, Types, Maintenance, Timing and Wiring Diagrams.

Michigan State Firemen Plan for Large Convention—Considerable local publicity is being given to the coming fifty-second convention of the Michigan State Firemen's Association which will be held in Caro on July 13-15.

Determine Travel of Fire Before Operating

Failure to Head-Off Extension Responsible for Large Loss; Know the Size of Your Fire at the Start

PROPER handling of this fire requires, as in all cases, immediate determination of the extent of the fire, and its directions of travel.

In its desire to quickly bring a fire under control a fire department frequently concentrates its efforts on what appears to be the largest part of the fire without checking up the extension of fire ino new territory.

This fire was unique in that there were so many open passages for spread of fire and such unusual means for this extension in the shape of frame conveyor sheds, and highly combustible materials on the conveyors and beneath them.

The sketch herewith shows the layout of the plant and the occupancy of the various buildings.

As described in our last issue, the plant had its own fire brigade which consisted of workmen assigned to the duty of extinguishing fire in the event of an alarm. The only apparatus included hose reels and 2½ inch hose thereon.

The plant had its own water system consisting of seven hydrants all supplied with a pressure of around 50 pounds.

The plant was located in the suburbs of the city and was fed by a ten-inch main about a mile long. There were five available hydrants on this ten-inch main for use in the event of fire in the plant.

Fire Department

The city fire department consists of three engine companies, four hose companies, one ladder company and one chemical company.

All three engine companies are provided with 750 gallon pumpers while each hose wagon carries from 1,200 to 2,000 feet of hose.

Response to alarms from this plant by the municipal fire department is as follows:

First alarm: Engine Co. No. 1, Hose Co. No. 1, Truck Co. No. 1 and Chemical Co. No. 1.

Second alarm: Engine Co. No. 2, Hose Cos. No. 2 and 3.

Third alarm: Engine Co. No. 3 and Hose Co. No. 4.

There were two engines held in reserve in the department.

The water pressure in the city main was maintained between 80 and 90 pounds during the course of the fire and there seemed to be a good supply of water at all times.

The Fire

The fire originated in the huller building and extended to all parts of the plant through frame conveyor sheds leading from the huller.

Just how the fire traveled through these sheds is not definitely known for its progress had not been appreciated until several buildings had been involved.

It appears, however, that fire originating in the hullers quickly flashed along an accumulation of lint beneath the coneveyor into the delinting house.

From this point fire traveled through the conveyor sheds or beneath the conveyors both to linting press room and through the seed cleaning house to the seed house.

Fire, after involving the huller building, quickly spread to the press room through conveyors and also to the hull house and meal house through conveyor sheds.

The fire occurred just at noon hour as the machines were about to be shut down. An alarm was immediately sounded bringing out the plant brigade, and ten minutes thereafter an alarm was transmitted for the municipal fire department, which responded with Engine Co. No. 1, Hose Co. No. 1, Truck Co. No. 1 and Chemical Co. No. 1.

Suggested Method of Handling Fire

This fire should be handled with the first alarm assignment, in addition to the plant brigade.

It will be assumed, as described in the story of the fire, that upon the arrival of the department three lines are in operation by the private fire brigade, from plant hydrants No. 3, 4 and 7, the latter of which is located just above the hull house as shown in the diagram.

After making a quick survey of the layout—at the same time stretching two lines into plant—it will likely be discovered that fire has entered hull house, delinting house, and press room.

This survey should be made at once, for the three lines in operation by the private fire brigade can well hold the fire in the huller building while check-up is being performed.

Assume that at the time the check-up is made fire is burning in the hull house, and in the conveyor shed leading to it; also in the conveyor shed and just entering the meal house; also in the press room; likewise in the delinting house and the conveyor shed between the huller building and delinting house.

One of lines from Engine Co. No. 1 stationed at hydrant No. 3 should be stretched to the delinting house, wetting down the fire therein and following the fire back through the conveyor shed into the huller building.

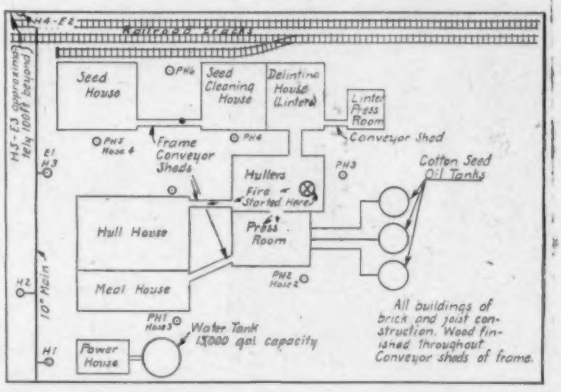
The second line from Engine Co. No. 1 to be stretched to the hull house, wetting down the fire therein and following the fire back through the conveyor shed to the huller building.

If necessary impress into service available workmen in the plant to assist in stretching lines.

Station Hose Co. No. 1 at hydrant No. 2 and stretch two lines from hydrant No. 2, with the assistance of workmen of the plant, one of these lines going to the meal house to head off fire from entering thereinto and to follow along the conveyor shed into the press room.

The other line should be stretched directly to the press room to wet down therein and hold the fire until some of the other lines become available. There is likely a connection between the city water main and the private water system of the plant so that in the event of water running short in the private plant system, the connecting valve should be opened to supply the plant with a plentiful quantity of water.

Members of truck company, upon arriving, assist in whatever



manner possible in opening up and stretching lines; also in making surveys to head off any fire which is originating or spreading.

Assign members of chemical company to stretch a line from private hydrant No. 2 to operate in on press room.

As the lines from engine Co. No. 1 succeed in following up the fire to the huller building they will operate into the huller building and in this way quickly bring the fire under control.

The above assignment should be able to handle the situation, which is not a serious one if the extensions are covered at the start.

Los Angeles Officers Thoroughly Trained

In his thirty-ninth annual report of the Los Angeles, Cal., fire department, Chief Engineer R. J. Scott outlines the work of the Fire College maintained by that city. The college, he says, was established on January 5, 1925, is in charge of Assistant Chief S. H. Dodd, assisted by Lieutenant W. W. Tebbets, with an enrollment of 204, consisting of 179 officers and the first 25 men on the eligible list for the position of Lieutenant. From that date until the end of the fiscal year, June 30, 1925, twelve lessons were given to the class, covering every phase of fire prevention and fire fighting, and eleven examinations were held on the work covered by these lessons.

During that period there have also been given lectures by the different chiefs on various subjects, such as arson, combustion, back draughts, dust explosions, auxiliary equipment, city ordinances regarding fire prevention work, sprinklers, fire extinguishers, thermopile detector service, storage of oil, protection of oil plants, oil fires, fire streams, hydraulics, exposures, care of quarters, care of hose, ventilation, basement fires, hotel fires,

frame building fires, overhauling, grass fires, school fires, office building and warehouse fires and salvage.

Fire departments in nearby cities are taking this course, and applications are on file from officers of other cities for enrollment in the fall course. Requests for information and literature have been received from fire department officials throughout the country, indicating the interest shown in the work of this College. The institute has been greatly aided by the installation of working models of sprinkler sysems, refrigerating plants, sectional cut hydrants and extinguishers, thermopile detectors, alarm systems, electrical switchboards and equipment, as well as all kinds of fire control tools and appliances. These have been installed without charge by firms which handle them, and valuable assistance has been given by the national and local boards of fire underwriters, municipal power and light departments, together with the hearty co-operation and support of all fire department chiefs, and Captain V. E. Pierret, of the Fire Prevention Bureau. The College is also indebted to various recognized experts in the several technical lines, who have uniformly given their services without charge or other obligation whatever.

Chief Rose A Fireman for 54 Years

Chief Charles H. Rose, of New London, Conn., has recently rounded out fifty-four years of service in the fire department.

Chief Charles H. Rose, New London, Conn.

When sixteen years of age, he joined the Relief Engine Company No. 1, which consisted of a double-decker hand pump and a two-reel hose wagon, the latter hand drawn. At that time there were three other companies in New London. The company that Chief Rose joined consisted of forty-five members. When the city obtained a water supply system, the Relief company was changed to the Thomas Hose Company.

The first office that Chief Rose was elected to was that of first assistant foreman in the Thomas Hose Company. Three years later he was elected foreman and for seven years he was in charge of this company. In 1894 he was made second assistant engineer, of the New London fire department. Upon the promotion of John Stanners to chief in 1901, Rose was made first assistant engineer. In 1923 when Chief Stanners resigned, he was made chief of the department.

Chief Rose is president of the Connecticut State Firemen's Association and is also a member of the Connecticut Fire Chiefs' Club and the New England Association of Fire Chiefs. His son, Earl Rose, is also a member of the department at New London and is driver of the new aerial ladder truck recently purchased by the city. Another son, John, is a member of the Konomocs Company.

Chief Rose was born in New York City but came to New London with his family when he was four years of age. The chief, who resides at No. 11 Rosemary street, possesses a host of friends in New London who have been attracted to him by his jovial and courteous manner. Chief Rose has had a long and faithful record with the department at New London to which he may look with pride and by which New London's fire fighting force has been benefited.

T. F. MAGNER.

Vancouver, B. C., May Increase Firemen's Pay—If means for financing the plan can be found, the firemen of Vancouver, B. C., will receive an increase in their salary of $7.50 a month.

Madison, N. J., Given Permit for Carnival—The firemen of Madison, N. J., were given a permit for holding a "Fireman's Week." There was opposition to the granting of the permit because of the alleged gambling devices. The mayor said in granting the permit, "I don't think that the borough will go to hell, one way or the other."

Massachusetts Chiefs Visit New Bedford

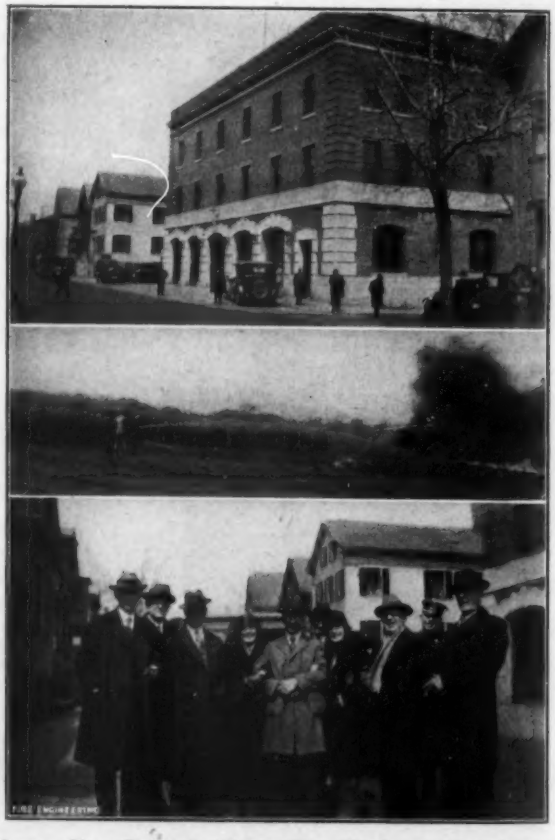
Members of the Fire Chiefs' Club of Massachusetts had an enjoyable outing at New Bedford on Wednesday, April 21. A large Mack motor bus left Copley Square, Boston, at 9:30 a. m., carrying many of the chiefs while others went over the road in their own cars. Upon arriving in New Bedford the party assembled at the Fire Headquarters Building where Chief Edward F. Dahill was on hand to extend a cordial welcome.

Luncheon was served at the Hotel New Bedford and was attended by ninety-five persons. Mayor Edward Hathaway extended the greetings of the municipality and paid a high tribute to Chief Dahill. Chief William F. Daley, of Brockton, president of the club, in replying to the mayor declared that Dahill is respected and loved by all and is a man whose opinions are highly valued in fire fighting matters. "New Bedford is indeed fortunate in having a man of Chief Dahill's calibre as head of its fire department" said Chief Daley.

Announcement was made of the election of Chief Ralph H. White, of Auburn, and Chief Arthur Belmore, of Webster, as active members of the club and of P. E. Charnock, of the New England Insurance Exchange, as an associate member. The death was reported of Ex-Chief George H. Wilfert, of Revere, who passed away on April 15.

At 3 o'clock a demonstration of the use of Amdyco foam for putting out oil fires was held in a field at the Oesting Farm off Kempton Street. A pit filled with 20 barrels of gasoline, kerosene, and fuel oil was ignited and allowed to blaze for some minutes before the foam stream was applied. A line of 500 feet of cotton rubber lined 2½ inch hose had been laid from a post hydrant to the Amdyco continuous foam generator from

(*Continued on page* 454)



Upper, New Bedford, Mass., Fire Headquarters. Center, Amdyco Foam Stream in Action, in Test in Which 20 Barrels of Gasoline, Kerosene and Fuel Oil Ablaze was Extinguished in a Little Over Four Minutes. Lower, Group of the Fire Chiefs' Party.

L. to R., Chief Geo. L. Johnson, Waltham; Chief James M. Casey, Cambridge; Chief Charles L. McCarthy, Worcester; Chief William F. Daley, Brockton, President of Club, Center, with Two Daughters of Chief Sennott; William A. Tighe, in Rear; Chief Daniel F. Sennott, Boston; Aide to Chief Sennott, and Superintendent Henry Thompson, Boston Protective Department.

COURSE OF INSTRUCTION IN FIRE PROTECTION

AS GIVEN AT THE UNIVERSITY OF ILLINOIS

MECHANICAL INSTALLATIONS

By RAYMOND T. NELSON,
Engineer, Western Actuarial Bureau, Chicago

THIS tenth installment of the University of Illinois Course in Fire Prevention continues the consideration of a type of common and very important hazards which the chief has to combat in his fire prevention work, the improper installation of mechanical and electrical devices. This paper is replete with valuable hints along these lines:

GASOLINE STORAGE TANKS (Underground) (Fig. 5)

Tanks: *Construction:* Tanks should be of approved construction.

Setting: Tanks should be buried at least 3 feet below ground and below the level of any piping to which tanks may be connected.

Tanks should be set on firm foundation and surrounded with soft earth or sand well tamped in place, or encased in at least 6 inches of concrete.

Fill Pipe should be screened, and terminate in a metal box or casting provided with a means for locking.

Pipe should extend into tanks within 2 inches of bottom.

Pipe should not be located less than 5 feet from any widow or other building opening.

Vent Pipe: A permanently open vent should be provided. Vent opening should be screened (30 x 30 brass mesh or equivalent) and of such a size as to allow proper flow of liquid during filling operation. Outlet should be provided with a weatherproof hood and terminate at a point at least 12 feet above top of fill pipe and at least 3 feet, horizontally or vertically, from any window or other building opening.

Where a battery of tanks is installed, vent pipe may run into a main header. Individual vent pipes should, however, be screened between tank and header, and connection to header should not be less than one foot above the level of the highest reservoir from which tanks may be filled.

Vent pipe should not extend into tank.

Suction Pipe: Liquid should be withdrawn from tank without unnecessary exposure by a substantially constructed discharge device of approved design.

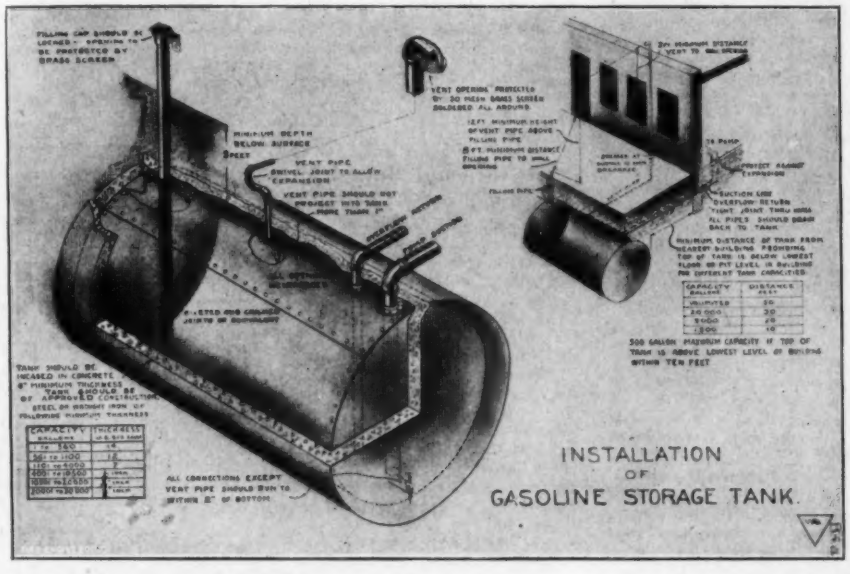


Fig. 5

Openings for withdrawal of liquid should be provided with a means for locking.

Pipe should extend into tank within 2 inches of bottom.

Overflow Pipe: An overflow pipe should be provided and extend into tank within 2 inches of bottom.

Piping should be of full weight galvanized wrought iron or steel, or brass.

Piping should run as directly as possible, be protected against injury and laid so pipes pitch back to supply tank.

All pipes should have well fitting joints. Unions, if used in place of right and left couplings, should be of an approved type.

Pipes leading to surface of ground should be cased or jacketed.

All outside piping should be laid below frost line in solid earth. Pipes should not be laid near or in same trench as other piping.

Openings for pipes through outside walls should be cemented and made oil tight.

Fitting: All fitting should be of an approved type.

Location: Distance of tanks from buildings should be as indicated in sketch.

Care and Attendance: Tank should be filled in daylight hours only. No fire or artificial light should be allowed near tanks. All openings should be locked except when in use.

Fuel Oil Storage Tanks (Underground)

Construction: Tanks should be of an approved type.

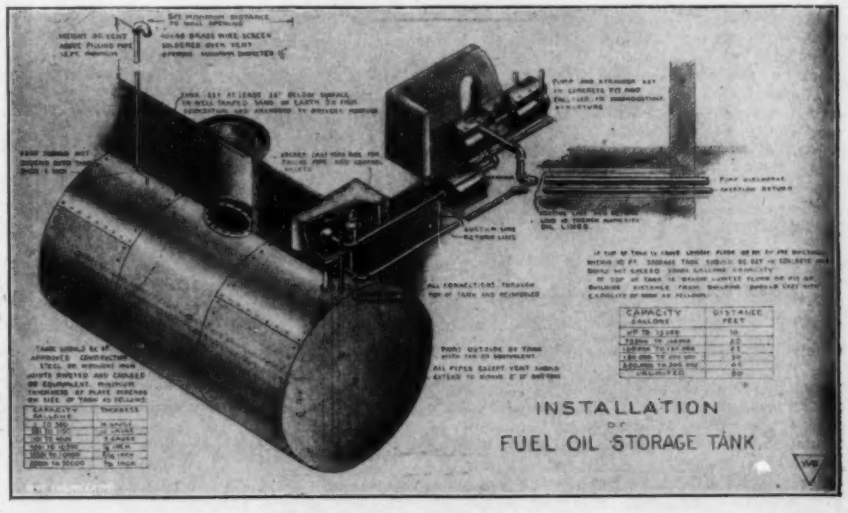


Fig. 6

At least 3 feet below ground or below level of any piping to which they may be connected; or

Under 18 inches of earth and a 6-inch reinforced concrete cover extending at least one foot beyond outline of tank in all directions.

Under 12 inches of earth when completely enclosed in reinforced concrete not less than 12 inches thick with at least a 6-inch space on sides between tank and concrete. Space should be filled with sand and tamped.

Tank should be anchored or weighted in place to prevent floating.

Fill pipes should be in cast iron or incombustible box which is provided with a lock. Pipe should extend into tank within 2 inches of bottom.

Vent Pipe: A permanently open vent, not less than 1¼ inches in diameter should be provided. Vent opening should be screened (40 x 40 brass mesh or equivalent) and of such a size to permit the proper flow of liquid during filling. Outlet should be provided with a weatherproof hood and terminate at a point at least 12 feet above top of fill pipe and at least 3 feet horizontally and vertically from any window or other building opening.

Vent pipe should not extend into tank.

Manhole covers should be securely fastened in place. No manhole should be used for filling purposes.

Suction Line: Liquid should be drawn from tank by an approved pumping system having strainers in suction line.

Pump and strainers should be set in a concrete pit and enclosed in an incombustible structure.

Suction pipe should extend into tank within 2 inches of bottom.

Overflow Pipe should extend into tank within 2 inches of bottom.

Piping: Cross connections permitting gravity flow from one tank to another should not exist except in case of outside tanks where it may be permitted through an open connection.

Material should be full weight wrought iron or steel. Piping for working pressures of 100 pounds or less should be able to withstand 150 pounds, while piping for working pressures of more than 100 pounds should have a 50% factor of safety.

Protection of Piping: Pipes leading to surface of ground or above floor should be protected against injury.

Outside piping should be laid below frost line in solid earth. Pipe should not be located near nor in same trench with other piping except steam lines for heating.

Opening in outside walls below ground level should be securely packed with flexible material and be oil tight.

Fittings should all be of an approved type.

Heating: Where it is necessary to heat oil in storage tanks in order to handle, the oil should not be heated to a temperature higher than 40° F. below the flash point, closed cup.

Heating should be done by means of properly installed coils in tank, using only hot water or steam. Thermostatic controls should be provided.

Location: Distance of tank from buildings should be as noted in sketch.

(*To be continued*)

New Fire Commissioner Named for New York

As we go to press news has been received that Mayor Walker of New York city has appointed John J. Dorman, clerk of the Court of Special Sessions of Kings county for the past six years, as fire commissioner.

Thomas J. Drennan, the retiring fire commissioner who served during the two terms of the Hylan administration and part of the present Walker term, has been named for the position of Commissioner of Jurors of Kings County.

Mr. Drennan has been Democratic leader of the Fourth Brooklyn assembly district for many years. His new position carries a salary of $6,000 a year while the fire commissionership pays $10,000 a year.

Massachusetts Chiefs Visit New Bedford

(*Continued from page* 452)

which 100 feet of hose led to a nozzle with 1¼ inch outlet. The pressure at the hydrant was 40 pounds. The fire was raging fiercely and a big wind was blowing at the time when the stream of foam was directed upon the blaze. In a little over four minutes the fire was completely extinguished. The demonstration was held under direction of Master Mechanic James H. Downey, Captain Edward A. Pollock, and members of Hose Company No. 2, of the New Bedford Fire Department. The Amdyco Corporation was represented by A. C. Whiting of the Boston office of the firm. The weather was clear and mild and the demonstration was witnessed by a great many spectators besides the chiefs and city officials.

Among the large number attending the outing and exhibition were:

Chief Patrick J. Hurley, of Holyoke; Chief Daniel F. Sennott, of Boston; Ex-Chief Peter E. Walsh, of Boston; Chief George L. Johnson, of Waltham; Chief James E. Smith, of Nashua, N. H.; Chief Fred A. Clark, of Attleboro; Chief James M. Casey, of Cambridge; Ex-Chief A. Howard Fiske, of Framingham; Chief Charles H. French, of Manchester, N. H.; Chief W. H. Hill, of Belmont; Chief P. E. Ham, of Everett; Supt. Henry Thompson, of the Boston Protective Department; Chief John T. Nichols, of Malden; Chief Charles L. McCarthy, of Worcester; Chief William H. Daggett, of Springfield; Chief H. J. Hyatt, of Fitchburg; Chief H. C. Kimball, of Salem; Chief James Warnock, of Swampscott; Chief E. R. Seaverns, of North Scituate; Chief W. H. Mahoney, of Peabody; Chief Howard Upham, of Needham; Ex-Chief Jesse Barrett, of Peabody; Chief Frank J. Tracey, of Woburn; Chief W. J. Brennock, of Cohasset; Ex-Chief Jaquith, of Randolph; Chief Edward Saunders, of Lowell; Chief A. H. Hiller, of Plymouth; Chief R. D. Wells, of Falmouth; Chief Fred A. Leonard, of Taunton; C. N. Sylvester, of the White Company; Justin McCarthy, of the Henry K. Barnes Co.; A. D. Wheeler, of the Gamewell Co.; T. G. Toomey, of New Bedford; Deputy Chief J. J. Donaghy, of New Bedford; W. H. Lewis, of Worcester; E. G. Moulton, of the Ahrens-Fox Co.; and J. M. Hardy, of Boston.

HARRY BELKNAP.

National Board Moves to New Home

The offices of the National Board of Fire Underwriters were moved, on April 23, to its new home on John and Gold streets, New York City. The building is fourteen stories high and has a two-story pent house and a basement; a number of fire protection devices have been incorporated in the building design and all of the fire protection equipment installed bears the label of the Underwriters' Laboratories. A separate organization known as the National Board of Fire Underwriters' Building Corporation has been formed as a holding corporation.

New Home of National Board.

The outer walls of building have a granite base and limestone to the second story—above this red matt face brick is used. From the eleventh floor and upward, there are setbacks.

All of the recommendations of the National Board building code have been followed. Exterior wall columns are protected by brick with the additional protection throughout of tiled furring on the inside of all exterior walls. In order to safeguard the supporting wall columns against corrosion due to moisture, they are plastered over the paint with rich Portland cement mortar, a practice called "parging."

A wet-pipe sprinkler system has been installed. Two systems of water supply for the sprinklers are provided—one from two cylindrical gravity tanks each of 9,000 gallons capacity installed on the second story of the pent house, and the other by Siamese connections outside of the building.

The windows are polished, transparent wired-glass set in metal frames and sash. All trim is either of metal or of "fireproofed" wood.

The main stairway is completely enclosed and is located in the front of the building. In the rear is an interior, smokeproof fire tower for emergency exits. Both stairways have approved self-closing fire doors.

WITH THE EDITOR

Look Out for These. Coincident with the season of conventions there blooms forth the usual crop of "promoters" whose aim in general is to publish souvenir booklets, convention proceedings, or even magazines designed to "benefit" fire department members or organizations.

Before you give sanction or endorsement to individuals who are not thoroughly known to issue such booklets or magazines with your name attached to them, find out a little about their past performances.

It may save you a lot of embarrassment, and considerable hard feelings on the part of business houses in your city, if you thoroughly know the people with whom you are to deal.

Some of these "organizations" engaged in issuing convention literature are absolutely dishonest.

Others, while living within the bounds of the law, look first after their own interests and fatten their own pocket books first, finally giving what's left over to the fire department.

Here are two incidents which show how the game is sometimes worked:

Two individuals last summer, stating they represented a printing house (which was subsequently found nonexistant), called on the officials of a volunteer firemens' association and offered to issue a "Yearbook" taking but half of the profits therefrom as compensation.

After securing the sanction of the association, with proper letters of recommendation, they immediately proceeded to solicit advertising from the business houses in the towns covered by this association. They required a 50% deposit on the advertising in advance. In other words, they collected 50% of the price of the advertisement from the customer at the time the order was given. The remaining 50% was to be paid when the advertisement appeared in the "Yearbook."

After thoroughly cleaning up the territory and taking their time—for they started well in advance of the convention—they packed their grips and, with the money they had collected, disappeared. The association and a number of the business houses who were "trimmed" are still looking for them.

The second case shows still greater ingenuity, and while apparently operating within the law, would have proved tremendously beneficial to the sponsors of the scheme but would have netted the fire department plenty of annoyance but little money had it not been forestalled.

The plan revolved around a firemen's journal which the organizers intended to print. The journal, which never appeared, was advertised as the official organ of the "Welfare and Publicity Committee for Firemen."

Here's the letter they sent out: "The Publicity and Welfare Committee for Firemen is now organized by the Fire Chiefs of America.

"The aims and objects of this Committee are to further the interests and promote the welfare of Firefighters everywhere, through the medium of "The Firemen's Journal," a magazine published in New York City and dedicated to the fireman's cause, for educational publicity and welfare purposes.

"Membership in this Committee is open to all Fire Chiefs and Marshals who have the interest of their men and community at heart.

"There will be no dues or fees of any kind. Your co-operation by submitting from time to time articles, or information from which articles may be compiled, on any subject of beneficial interest to the Fraternity and the public in general, are the only requirements for membership.

"As you know the firemen need a publication or medium through which they may commune with each other and with the public as well; just as all other trades and professions have.

" 'The Firemen's Journal' as the official organ of the Firemen's Welfare and Publicity Committee, will through its columns spread and disseminate all such information as may be considered beneficial to the needs, progress and modern development of the Fire Departments everywhere.

"Hence The Firemen's Welfare and Publicity Committee is being organized in order to obtain the necessary information and data for such publicity.

"With this in mind, may we enroll you as a member and count on your active support in its undertaking?

"A prompt reply with a story and your photograph if possible will be appreciated."

Upon thorough investigation it was learned that the concern was to operate in the following way:

Representatives would go to a city, usually of moderate size, and interest the local fire chief in getting out a special city edition of the Firemen's Journal, promising to give a percentage of the advertising revenue to the fire department relief fund. If the chief was not aware of their scheme he would sanction the project and give permission to use his name.

Then a crew of high pressure advertising solicitors would swoop down on the city, armed with credentials from the chief, and in the name of the fire department practically sand-bag every local manufacturer and merchant into an advertising donation, giving the impression that the entire proceeds would be for the Firemen's Relief Fund. Naturally, the local business men are quick to contribute to what seems to be a worthy cause.

But the arrangement of money distribution would be for the promoters to retain 50% of the gross receipts, and what's left of the other 50% after publishing and all other expenses are deducted, would go to the relief fund—usually less than 25% of the money collected. In other words, if the promoters got $10,000 in advertising donations, the relief fund could consider itself fortunate in receiving $2,500 of this amount.

Fire department officials and fire companies, are warned against being "rung in" on such schemes, which mislead and impose upon the business men of their communities, and which accomplish practically no other purpose than to enrich the promoters.

The investigation into the workings of this particular "committee" revealed the fact that, contrary to the statement in the letter, no fire chief, nor anyone else legitimately connected with the fire fighting profession, had anything to do with the actual organization. It is a safe assumption that no fire chief with a knowledge of the real object of the so-called "organization" would allow his name to be used in connection with it.

And before an agreement is entered into for publication of convention or souvenir booklets, fire department authorities should determine the integrity of the people backing the scheme, and secure in writing a detailed outline of their plan.

No concession should be given under any conditions to individuals or organizations with whom the fire department is not thoroughly familiar and whose reputation is not of the very highest.

Report on New York Relief Fund

The Fire Commissioner of New York has made his annual report to the Mayor on the status of the Fire Department Relief Fund, for the year 1925.

The report, compiled by Deputy Chief Peter J. Quigley, in charge of the Division of Pensions, discloses that for the year ended December 31, 1925, there were on the pension rolls of the department 3,047 annuitants at an annual charge of $2,621,-226.54, a net increase over 1924 of $258,452.83.

On December 31, 1924, there were 2,880 annuitants on the rolls at an annual charge of $2,362,773.71.

During the past year, 195 members of the uniformed force were retired on pensions and 81 widows, guardians and dependents of members of the department were added, making the total 276 annuitants.

The year closed with the pension rolls showing 1,963 retired officers and firemen, 11 relieved members, 1,073 widows, guardians or dependents—a total of 3,047.

Of the 1,073 widows on the roster of pensioners, 221 of them are receiving $600 a year pension, in the discretion of the Fire Commissioner. The usual annual pension to a widow is $300, but the Fire Commissioner, by reason of the letter of the law, rather than by its intention, may in his wisdom and "big heartedness" grant a widow $600 a year. Of course there are other widows receiving $1,000 a year, but these are the survivors of members killed in the line of duty—the $1,000 pension being the maximum allowed under the statutes.

The report further shows that during the year 1925, the total receipts were $2,555,558.13, to which the largest contributing factor was $1,536,953.97 in city revenue bonds, in the form of certificates of indebtedness. Other forms of receipts were $676,250 from combustible licenses fees; $2,712 in contributions by admiring or appreciative citizens; $2,606 in penalties imposed by the courts; $286,351 from foreign fire insurance tax; $32,194 in interest on investments; $2,411 in fines imposed on delinquent members of the department; $10,169 exacted from members taking leaves of absence.

The fund has lost certain revenue in recent years due to legislation, as for instance: liquor licenses, when liquor was a legally taxable commodity brought in thousands of dollars a year to the firemen's pension fund, but no more. From 1871 to 1923 the liquor license fees paid to the firemen's pension fund amounted to $9,073,757, but since 1923, nothing. Last year the fines dropped from $2,628 in 1924 to $2,403; the donations dropped from $2,989 to $2,712; penalties dropped from $3,248 to $2,529; foreign fire insurance tax from $296,889 to $286,351; special leaves increased however from $8,420 to $9,921.

The Division of Combustibles made a substantial increase in revenues turned into the fund. In 1924 the fund received from this source of revenue, $534,811; in 1925 it received $619,865, an increase of $236,478.

On the other hand the fund tapped the city treasury more heavily in 1925 than it did in 1924. Last year it received from the City Comptroller's office in revenue bonds $1,536,953, an increase of $236,475.

From the time the fund was estiblished in 1871 to the end of December 1925, the recapitulation shows receipts of $32,476,-484 and disbursements of $31,627,336, leaving a balance of $849,147.

The New York Fire Department Life Insurance Fund, a separate account, shows a balance of $65,182.77 at the end of 1925. The balance on hand at the end of 1924 was $79,422, the receipts during the year were $199,763, making the total $279,185. The disbursements were $214,003, leaving a balance of $65,182.77.

THAT WINNING SMILE—

Hats off, boys, to Fireman Joseph H. Barker of Engine Co. 59, New York City, whose suggestion "The Fire Brigade" took first prize — $500 cash — in the film title contest conducted by the Metro-Goldwyn-Mayer Studios and the International Association of Fire Engineers. Above photograph was taken last week at the New York offices of Metro-Goldwyn-Mayer after presentation of the check.

Barker, while only in the New York Department six months, has put six years in the Fire Patrol and two years as an inspector in the Fire Prevention Bureau. He is 32, unmarried, and the sole support of his widowed mother with whom he lives.

The full list of prize winners and details of the contest and the film appeared in the last issue of FIRE ENGINEERING.

New Life Nets for Allentown, Pa.—Two new life nets have been purchased for Allentown, Pa. The nets are nine feet in diameter and will be placed in two fire stations.

Galesburg, Ill., Plans for Pension Fund—Plans are being made in Galesburg, Ill., for the establishment of a pension fund. According to the mayor the state law requires the establishment of such a fund. All firemen who have been in the service twenty years or more are eligible to receive a pension.

QUESTIONS AND ANSWERS

Conducted by FRED SHEPPERD, B. Sc., M. E.

"He that questioneth much shall learn much"—BACON

NOTE—Readers of FIRE ENGINEERING are invited to send in questions, which will be answered in the order received. Names are omitted from questions unless otherwise specified.

Design of Bungalow Fire Stations

To the Editor:

Can you please give me information on the design and construction of bungalow fire stations? We are contemplating the construction of such a station at an early date.

Very truly yours,

M. C.

Answer: Most of the information available on the design and construction of bungalow type fire stations has been printed from time to time in FIRE AND WATER ENGINEERING, and FIRE ENGINEERING.

You are especially recommended to read an article on "Designing a Fire Station for Residential Districts," by Chief Howard L. Stanton, of Norwich, Conn., which appeared on page 1307 in the December 17, 1924, issue; another good article appeared by Chief Ferguson of Forth Worth, Tex., on "Some Good Examples of Bungalow Fire Station Design," in the January 9, 1924, issue.

On page 1293 of the December 9, 1925, issue there appeared the plan and elevation of a fire station constructed in Anderson, Ind. This station was constructed complete with all fixtures at a cost somewhat less than $10,000.

In addition there has appeared illustration of bungalow type stations in the following issues:

Houston, Tex., station on page 689 of the April 9, 1924, issue; Nashville, Tenn., station on page 1213 of the January 20, 1923, issue; page 1389 of the December 24, 1925, issue contains a design of a Los Angeles, Cal., station, and on page 604 of the April 1, 1925, issue there is a description of the central fire station constructed in Lakewood, Fla.

Unquestionably, you will find all the information that you desire in these articles. The library in your city may have the bound back volumes of these issues on file.

Fire Department History

To the Editor:

We are planning somewhat of a pagent in connection with the housing of a new apparatus. We would like to letter some banners giving the dates of the introduction of the following—bucket brigade, hose reel, ladder truck steam engine and pumper.

Very truly yours,

B. W. L.

Answer: It is impossible to trace the history of the fire department to the point of its inception. In the days of the ancient Romans and even before that time, history mentions the fact that in connection with the plan of warfare in existence in that period, there were skilled men in the art of shooting flaming arrows on to buildings. This leads one to believe that there were likewise, some corps skilled in extinguishing such flames.

Going to the American practice, at a meeting of the common council of New York on March 15, 1683, in the 36th year of the reign of Charles II, an order was issued for providing hooks on which were hung buckets and ladders for avoiding the perils of fire. A rule was made that a house with two chimneys shall have one bucket, every brewer six, and every baker, three. By November 16, 1695, every home was ordered to have a fire bucket, although there is some doubt as to how religiously this rule was obeyed. It is probably that the first organized fire bucket brigade was organized during that period.

The first hand fire engine in North America, was imported from London in 1731. At that time New Netherlands (New York), then a British province, ordered two Newsham engines. On April 15, 1736, a convenient house was ordered for the keeping of the fire apparatus and this was probably the first fire station. On November 4, 1737, a petition was drawn for the appointment of twenty-four able bodied men for the working of the fire engines, and as a reward for their services, they were to be exempt from serving as a constable, in the militia or being enlisted during the time that they were members of the fire department.

Hose or leathern tubes as they were then called, were first used in 1672 in Amsterdam. The tubes were made in fifty-foot lengths with brass screws at each end. This formed an epoc in the introduction of the fire engine. Previous to the engine, the hose was connected to a tank which was filled by hand buckets. About 1818, the first hose reel was introduced in this country. A concern in Philadelphia first started making these (hose) tubes in 1808.

Acting on the incentive offered by the Mechanics' Institute of New York who offered a prize for the best practical method of applying steam to fire engines, Captain John Ericcson, afterwards designer of the famous Monitor, presented plans for a machine possessing the power equivalent to 108 men. This machine dates back to 1840.

The use of ladders dates back to ancient times, and it is probable that some kind of conveyance was designed at that period for transporting the ladders to the scene of the fire.

The volunteer fire system is accredited to the close of the eighteenth century. George Washington was a regularly enrolled fireman of Alexandria, Va., and even though the success of the Revolutionary War commanded most of his interest, he thought enough of the fire department to purchase a hand pumper for his community out of his personal funds.

Cincinnati, in 1853, introduced the first paid fire department and the new plan spread to other cities. Although most of the larger cities have a paid fire department, the volunteer system is still in use in a number of Pennsylvania towns, notably York, Reading and Allentown.

The use of the present automobile pumper dates back to 1908. The art of fire-fighting continues to advance, and a number of new devices in the extinguishing of fires have been introduced in the present period.

Solving for Nozzle Pressure

To the Editor:

Will you kindly solve the following according to "Red Book" calculations so that we may settle an argument in our company.

What is the nozzle pressure in the following layout?

Engine pressure 220 pounds, 1,800 feet of 2½-inch hose and ¾-inch tip.

I have worked it out as follows, and the company members claim I am wrong.

By formulae, K equals .0316; L (number of 50-ft. lengths) equals 36; .0316 times 36 equals 1.1376, plus 1.1 equals 2.2376. 220 pounds divided by 2.2376 equals 98 which is the nozzle pressure.

Respectfully,

LeR. H. M. Grand Rapids, Mich.

April 4, 1926.

Answer. Your answer has been checked very carefully and your calculations are correct.

Your solution, 98 pounds nozzle pressure for a ¾-inch nozzle on 1,800 feet of 2½-inch hose, where the engine pressure is 220 pounds, is sufficiently accurate for practical purposes.

This nozzle pressure is as near to a correct figure as it is possible to calculate by any of the formulae at present available.

Effect of Insurance on Fire Loss

To the Editor:

Will you kindly answer the following questions in your journal as we have had some heated debates pro and con about the house on this subject.

Does fire insurance reduce fire losses? State fully.

According to statistics, what percentage of fire are chargeable to carelessness?

Thanking you in advance I am,

A subscriber,

D. H., E. Oakland, Calif.

March 24, 1926.

Answer. Fire insurance does not reduce fire losses. As a matter of fact, insurance is apt to increase fire loss due to the feeling that in the event of fire the insurance companies pay the loss and the party having the fire is no great loser.

Insurance tends to lessen vigilance.

Insurance, when issued in figures above the actual value of the property, is a direct incentive to burn. It is estimated that 50% of the fire loss in this country is due to incendiarism, prompted in the majority of cases by the desire to gain through excessive insurance placed on property.

This is one of the most serious problems insurance companies now have to combat, but as long as agents are permitted to place insurance in excess of the value of the property insured, incendiary fires will continue.

Answer 2. No authentic figures are available showing the percentage of fires chargeable to carelessness. It has been estimated by various authorities that fully 75% of fires may be charged to this cause. In speaking of the number of fires, the actual count is considered and not the loss.

It should be remembered that incendiary fires usually create larger losses than do accidental fires, due to the fact that the former are more thoroughly set and means provided for their quick extension. They are less likely to be discovered, as well, due to the secrecy employed by incendiaries.

KENLON MAKES ANNUAL REPORT OF NEW YORK FIRE DEPARTMENT

Comparison of Years 1924 and 1925—Some Interesting Figures—Efficiency of Department Shown

FIRE CHIEF JOHN KENLON of New York has filed with the Fire Commissioner of that city the statistical report of the fire fighting branch of the New York Department, for the year ended December 31, 1925. *As New York is the largest city on the Western Hemisphere the annual report of its Fire Chief is always of interest to the fire fighting profession; consequently, it is set forth here in greater detail than most annual reports are usually treated. For the purpose of comparison, the statistics for the year* 1924 *are also given:*

Chief John Kenlon, New York City.

During the year 1925, New York City, with a population of 5,873,356, an area of 314.75 miles or 201,446 acres, containing 567,954 buildings (all kinds) with a property assessment of $11,155,299,900, had a fire loss of $18,869,085 which is an increase of $184,250 over the year 1924.

The per capita loss was $3.21 last year as against $3.10 for the year 1924.

The efficiency of the department may be determined from the fact that 90% of 22,849 fires were confined to the point of origin, which is 1 per cent better than the number of fires confined to the point of origin in 1924.

The city is divided politically into five boroughs or counties, all under one municipal government. Therefore, the losses for the year 1925 are set forth by boroughs, as follows:

Borough	1925	1924
Manhattan	$ 7,761,580	$ 9,855,390
Bronx	1,265,985	1,203,910
Richmond	585,300	913,765
Brooklyn	7,386,080	5,452,275
Queens	1,870,140	1,259,495
Total	$18,869,085	$18,684,835

Alarms of Fire

Received	28,091	27,554
False or unnecessary	5,242	4,923
From street boxes	18,644	17,816
By telephone	3,828	4,293
Special box	5,050	4,906

Alarms of Fire (Continued)

	1925	1924
Automatic	523	480
Pneumatic	46	59

Actual Fires

Fires	22,849	22,631
Confined to origin	20,578	20,274
Confined to building	1,885	1,939
Extended to other building	386	418
Fires in buildings	14,483	14,318
Fires in vessels	188	180
Miscellaneous	8,178	8,133
Fires per 100 structures	4.02	4.33
Fires per 1,000 population	3.89	3.76
Per capita loss	$3.21	$3.10

Time of Occurrence

6 a. m. to noon	4,137	4,110
Noon to 6 p. m.	7,886	7,923
6 p. m. to 12 p. m.	7,709	7,716
12 p. m. to 6 a. m.	3,117	2,882

Water Delivery

Fresh water (gallons)	67,016,937	76,612,400
Salt water (gallons)	36,607,061	81,644,627

How Extinguished

Without engine stream	11,336	11,412
With 1 engine stream	7,800	7,539
2 or 3 engine streams	1,258	1,150
More than 3 streams	319	333
Sprinklers	358	362
With 1 h.p. stream	1,370	1,398
2 or 3 h.p. streams	290	296
Exceeding 3 h.p. streams	118	141

Classification of Fires

	1925	1924
Asylums, homes, etc	15	12
Auto service stations	37	37
Breweries	0	2
Buildings under construction or demolition	183	181
Churches	40	45
Club houses	35	33
Dance halls	34	28
Dwellings	2,577	2,560
Factories	566	557
Factories (lofts)	1,288	1,435
Furnished rooms	342	374
Garages (private)	140	139
Garages (public)	368	364
Hospitals	24	25
Hotels	106	77
Lodging houses	6	11
Office buildings	279	207
Public buildings	25	17
Schools (private)	12	21
Schools (public)	21	30
Sheds	248	298
Stables, barns	86	97
Storehouses	119	115
Storehouses (film)	1	0
Storehouses (rags and paper)	25	22
Store buildings	561	588
Stores (department)	12	11
Tenements	7,054	6,650
Theatres	48	47
Theatres (movies)	41	40
Unoccupied buildings	190	295
Total buildings	14,483	14,318
Bonfires, fences, vehicles, etc.	7,682	7,639
Coal and lumber yards	18	37
Piers and wharves	66	43
Railroad cars and stations	412	414
Ships, boats, etc	188	180
Grand total	22,849	22,631

The Fire Battalion district in which most fires occurred last year was No. 12 in the east side of Harlem. That battalion had 1,085 fires in 1925 as against 1,071 in the year 1924. The nearest approach to this was in the 44th battalion in the Brownsville section of Brooklyn where there were 1,041 fires, as against 933 in the year 1924. DALY.

New Central Fire Station for Burlington, Vt.—Specifications are being prepared for the new central fire station for Burlington, Vt.

Little Valley, N. Y., Re-elects Chief—W. F. Andrew was re-elected chief of Little Valley, N. Y., and S. L. Worth, and R. F. Fox, first and second chief respectively.

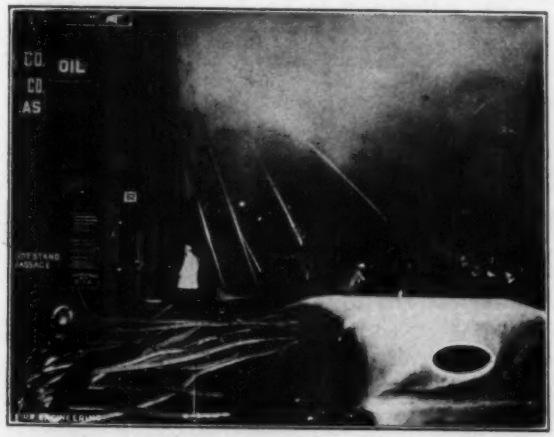
BOSTON HAS TWO 3-ALARM FIRES; BOTH OCCUR ON SAME NIGHT

Fire on River Front Warehouse Brings Out Fire Boats—Other Fire in Brick Building—Water Supply Ample

ON Saturday evening, March 13, the Boston Fire Department had two serious third-alarm fires.

The first one occurred in an old stone building on the land end of Long Wharf used as a warehouse. This blaze was a stubborn one and started from an unknown cause in the coffee storerooms of the Martin L. Hall Company, on the third floor of No. 63 Long Wharf. The fire extended to the 4th and 5th floors of this and the adjoining building. The building is a long structure divided at intervals by brick fire-walls. The fire was fought by high pressure lines, engine streams, and by lines from fireboats. Extension ladders were used both front and rear, effective streams being directed into the windows from these ladders. Wagon pipes were also brought into play.

While there was still a considerable amount of apparatus at this fire an automatic alarm came in, quickly followed by a street box alarm for a very threatening fire in a 5 story brick mercantile building at the corner of Hanover and Union Streets in the north end business section of the city. This second fire rapidly assumed dangerous proportions and the flames swept through two floors of the building, the 3rd and 4th. It appeared for a time as if the whole building would be destroyed; but the department made a remarkable stop and soon brought the



Boston Firemen Fighting Blaze At the Land End of Long Wharf, One of Two Simultaneous Fires on Same Night.

flames under control. Three wagon gun streams and a tower stream from hose lines laid from high pressure hydrants conveniently situated were used with good effect and followed up by lines taken over stairs, ladders, and fire escapes. Heavy water damage was caused to retail stores on the ground floor of the building.

The first alarm from Box 1257, Atlantic Avenue at Long Wharf, was sounded at 7:48 p. m. This was followed by a second alarm at 7:54 and a third at 7:57. The response of apparatus was as follows: Engine companies 25, 8, 39, 26, and 44 (fireboat), ladder companies 8 and 1, rescue company 1, and water tower 1, all on the first alarm; engine companies 4, 7, 6, 50, and 47 (fireboat), ladder companies 18 and 17, and water tower 3, on the second alarm; engine companies 15, 22, 35, and 9 and ladder company 13 on the third alarm. Protective department wagons, searchlight car, and fuel supply wagon also responded. Chief Daniel F. Sennott was in charge of department operations and was assisted by Deputy Chiefs Albert J. Caulfield and Henry J. Power and by District Chiefs Howard, Mahoney, and Richer.

The covering or locating assignments were as follows: on the 2nd alarm—Engine 15 to engine 25, engine 22 to engine 4, ladder 13 to ladder 8, ladder 24 to ladder 1, chief of district 2 to house of engine 4, and chief of district 7 to house of engine 26; on the 3rd alarm—Engine 10 to engine 4, engine 23 to engine 26, engine 43 to engine 25, ladder 5 to ladder 8, and deputy chief of division 3 to house of engine 22. Engine 23 was sent to the house of engine 7 by direction of the fire alarm office.

The fire originated from an unknown cause on the third floor of No. 63 Long Wharf, a section of an old 5½ story stone and brick mercantile building. The flames extended to the 4th and 5th floors of No. 63 and into the 4th and 5th floors of No. 64 in the same block, probably through open fire doors. Two wagon gun streams were used on the front side of the building and one in the rear. Lines were taken over stairways and fire escapes and streams were played from aerial ladders both front and rear. Salt water lines were laid from the fireboats which made fast to the dock. The building had a peaked roof covered with slate. It was owned by the Long Wharf Corporation and the burned section was occupied by the Martin L. Hall Company, wholesale coffee dealers. The department laid 5,600 feet of 2½ and 3 inch cotton rubber lined hose. Nozzles used ranged in size from 1¼ to 1¾ inches.

Besides the high pressure hydrant lines water was taken from an 8 inch main with four Lowery hydrants, this main

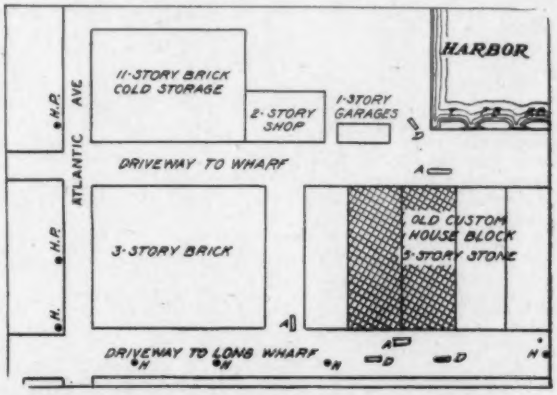
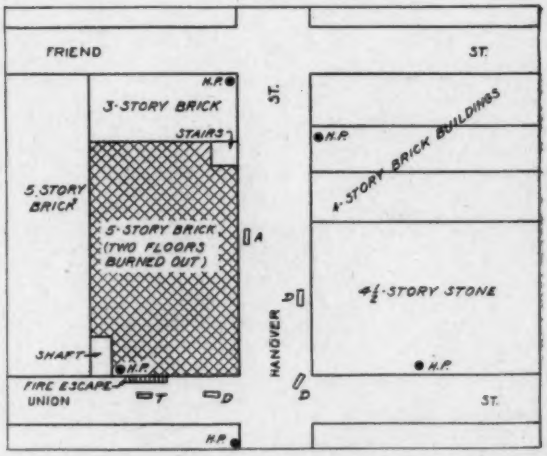


Diagram of Long Wharf Fire with Fire-Fighting Plan
In this drawing, H. P.—high pressure hydrant; H—hydrant; T—tug boat; F. B.—fire boat; A—aerial ladder; D—deck gun

running out on the wharf to a dead end. With the exception of one tractor drawn steam fire engine all the engines in use were American-LaFrance motor pumpers. Three aerial ladders were used. Falling slates from the roof menaced the firemen at work on the ladders. The fire was a very smoky one and gave the department a hard fight for nearly two hours. A detail of one officer with 15 men and 3 lines of hose remained at the scene all night and part of the next day to do overhauling.

At 10:34 p. m. an automatic alarm was received and was



Layout of Defense of 3-Alarm Fire in Brick Building
In this drawing, H. P.—high pressure hydrant; A—aerial ladder; T—water tower; D—deck gun

followed by second and third alarms from Box 1214, Corner of Hanover and Endicott streets, at 10:41, and 10:45 respectively. At this time the third alarm was still in from Box 1257 for the Long Wharf fire. Engine 4 and ladder 24 responded to the automatic call with District Chief Tague who was covering in at Engine 4, and were joined almost at once by engine 6, engine 50, ladder 5, and water tower 1 which answered the first alarm from the street box (engine 50 being dispatched to the scene by order from the fire alarm office. On the second alarm

engines 8, 15, 23, and 38, ladders 3 and 9, water tower, 2 district chief 7, and deputy chief of division 2 responded, ladders 3 and 9, engines 8 and 38, tower 2 and deputy chief of division 2 being sent by order of the fire alarm office. On the 3rd alarm the response consisted of engines 3, 9, 10, and 22, and ladder 12, engines 3 and 22 and ladder 12 being sent by order of the fire alarm office. The officers at the fire were Chief Sennott, Deputy Chief Albert J. Caulfield, and District Chiefs Tague, Howard, Mahoney, and Downey.

The fire originated on the third floor of the brick building at 119 Hanover Street and extended to the 4th and 5th floors. The building was occupied by stores on the ground floor and by the Menark Clothing Company on the upper stories. The building was 100 ft. by 45 ft. by 70 ft. Three wagon guns and a water tower were used in the early stage of this fire and lines were also taken over fire escapes and stairways. In a remarkably short space of time the flames which were raging fiercely on two floors of the building were brought under control. In three quarters of an hour some of the extra alarm companies were taking up their lines.

There was an abundance of high pressure hydrants available in close proximity to the burning building. Five high pressure hydrants were used. These hydrants had four outlets each and were connected with 12 and 16 inch mains. The pumping was done from Station No. 1 for both fires and the pressure furnished was 125 pounds. The department laid 2,900 feet of hose at this fire. Several firemen suffered minor injuries. A detail of one officer and three men remained at the scene after the apparatus left. The members of the Boston Protective Department under Supt. Henry Thompson spread a large number of covers to protect goods in stores on the lower floors. The newspaper estimates of the loss ranged as high as $300,000 for both fires, the damage by fire at the Long Wharf building being placed at $150,000 and from $100,000 to $150,000 in the Hanover Street fire including the water damage. The fire department estimates were considerably lower.

HARRY BELKNAP.

SECOND FIFTH-ALARM FIRE IN NEW YORK WITHIN WEEK

Big Furniture Warehouse Blaze Causes Pall of Smoke Over Upper Section of City—Thirteen Firemen Overcome and Injured

NEW YORK had its second fire of fifth alarm proportions within a week when flames destroyed the four story furniture warehouse of Deutsch Bros. one East 123rd street, Saturday afternoon, April 24th.

The fire originated in the cellar about half past one o'clock, from a cause as yet not determined. There were about 25 employees in the warehouse at the time, ten of them being painters and varnishers on the top floor. This is the firm's busiest season and a fire was the most unwelcome thing that could have happened to the business. The house caters to June brides on the installment plan and has several branch stores throughout the city.

The first alarm brought Batt. Chief Raymond L. George, of the 12 battalion, the busiest fire district in New York. Three engine companies and two truck companies entered the celler only to find that the fire had gained considerable headway and was going up an interior shaft or hoistway. The sidewalk was well occupied with furniture ready for delivery.

Chief George sent in a second alarm which brought Deputy Chief George L. McKenna of the Fifth Division, who sounded a third alarm, bringing Assistant Chief of Department Joseph B. Martin. The rear wall of the brick building had no opening below the third floor; therefore the fire had to be attacked from the front only. Five and six story tenements adjoined the warehouse on both sides. The warehouse has a frontage of about 75 feet and is that much deep as well.

The first, second and third alarm companies waged an unsuccessful fight to confine the fire to the cellar. The building became heavily charged and the heat was intense. Forty minutes after the third alarm, the fire "blew" and Chief Martin ordered all hands to the outside. He then sounded a fourth and fifth alarm, gaving him a total of 21 engines, six trucks, a tower, four battalion chiefs, one deputy chief, an ambulance and a gasoline supply truck.

Thirteen members of the department were treated by Dr. Archer, the honorary medical officer. Eight of these were for smoke and five for slight injuries. The serious smoke cases were mainly among the members of Engine Co. 36, the first due engine company.

The humidity caused a pall of smoke to hang low for hours and Harlem was as dark as night for quite some time. The smoke drove tenants from tenements nearby. Fire Commissioner Drennan, Deputy Commissioner Hannon, Chief Inspector Lahey of Police, Fire Commissioner Anderson of Houston, Texas, and Fire Chief Ollre, of that city were among the spectators. Assistant Chief James Hogan, of Bayonne, N. J., who is attending the New York Fire College reported to the commanding officer and went to work with one of the companies in the rear of the building.

DALY.

WHAT'S BURNING

From reports covering the United States and Canada, the estimated losses by fire during the week ending April 23, 1926, aggregated $8,079,500, as compared with $10,108,900 for the corresponding week in 1925. The total is derived by adding to the amount in the list given, which includes only those of $25,000 loss and over a sum equal to thirty per cent of that amount, statistics showing that the smaller fires average about that proportion of the larger. Losses for the week ending April 30, follow in their right order.

The figures published in this list, compiled from telegraphic reports of fires occurring during the weeks, are based on estimates made at the time, which are necessarily hurried and are subject to latter investigation and consequent correction. Taken as a whole, however, they give an approximately correct view of the losses incurred. The figures represent loss in thousands.

TERRE HAUTE, IND.—Hub Clothing Store, 326 Wabash Ave.. 30
ALBION, MICH.—South unit of the Michigan Electric Railway Car barns..... 450
COPLAY, PA.—Garage of Charles Esely destroyed..... 25
DENDRON, VA.—Shops of Surry Lumber Company destroyed.. 40

Dense Smoke Blankets Harlem Section of New York City

The firemen who responded to the five-alarm fire of the Deutsch Brothers furniture warehouse in the Harlem section of New York City were greatly hampered by the thick blanket of yellow smoke that covered the immediate section. The district was dark for about four hours and smoke entered the subway at 125th street. The fire was in charge of Chief "Smoky" Joe Martin, and Commissioner Drennan and Chief Inspector Leahy responded. Incidentally the fire interrupted a turkey dinner at Engine 36 in honor of a fireman who was retiring after twenty years of service. The fire damage is estimated at $50,000.

More water when you need it.

Seagrave Pumpers do deliver more water.

Their capacities at higher pressures are well known.

The Chief who uses Seagrave Equipment always gets more water when he needs it.

The SEAGRAVE CORPORATION
COLUMBUS, OHIO

BRANCH OFFICES

Boston, Mass.
New Haven, Conn.
Philadelphia, Pa.
Chicago, Ill.
Dallas, Texas
Seattle, Wash.
Birmingham, Ala.
Kansas City, Mo.
Pittsburgh, Pa.
Los Angeles, Calif.
San Francisco, Calif.

"LET YOUR NEXT ONE BE A SEAGRAVE"

Kelly Kats give better traction

The side vents, a construction feature originated and perfected by Kelly, give Kelly Kats surefooted traction under any and all road conditions. Rough roads or slippery asphalt, mud or sand —none of these holds any terrors for the fire truck that rolls on Kelly Kats. Kats will carry a truck surely and safely wherever the engine can drive it.

Kelly-Springfield Tire Co.

250 West 57th Street **New York, N. Y.**

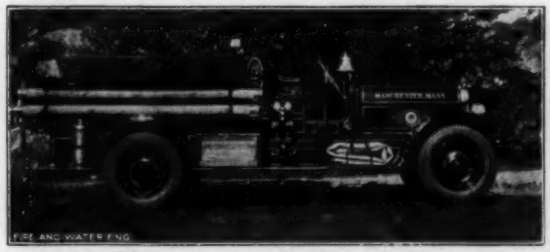
KELLY
TRADE MARK REG.
KATS
THE TIRES WITH NINE LIVES

KELLY-SPRINGFIELD TIRE CO. 250 WEST 57th ST. NEW YORK, N.Y.

MT. CARMEL, PA.—Alaskan Colliery destroyed..... 450
ATLANTIC CITY, N. J.—Three dwellings in Westminster Ave.. 25
BROAD BROOK, CONN.—Donovan home and adjoining tobacco warehouse 175
SUSQUEHANNA, PENNA.—Lumber yard, two garages and dwelling destroyed 85
EVANSVILLE, IND.—Stockroom of Bon Marche Shop..... 25
WESTWOOD, MASS.—Property owned by Edmund D. Codman.. 25
WEST BROOKFIELD, MASS.—Poultry structure of J. S. McLearn destroyed 50
AKELY, MINN.—Six business establishments destroyed..... 85
SKANEATELES FALLS, N. Y.—Warehouse stock of Draycott Mills, Inc. 40
EAST LIVERPOOL, OHIO.—S. C. Williams Company copper shop destroyed 40
AKRON, OHIO.—Home of Charles Reymann..... 35
McKEESPORT, PA.—Christian & Missionary Alliance Church.. 25
OLD FORGE, PA.—Eight buildings including Babylon Hotel.. 40
JAXBORO, TENN.—Campbell County Court House destroyed... 150
ROARING SPRINGS, TEXAS.—Four business establishments.. 85
DALLAS, TEXAS.—Warehouse of Huey & Philp Hardware Company 40
MILLBURN, N. J.—Manor Farm in Brantwood Section..... 25
SARATOGA SPRINGS, N. Y.—Coal pocket of Saratoga Coal Company destroyed 85
HOBOKEN, N. J.—Factory of Interstate Shade Cloth Company 80
WEST McHENRY, ILL.—Nine buildings including Northwest Hotel 65
EVANSVILLE, IND.—Shop at 308 Main Street..... 25
ST. LOUIS, MO.—Evertz-Etz Paper Company..... 30
PURCHASE, N. Y.—Country home of Frank Bach destroyed 60
WASHINGTON, PA.—Rosemire House on National Pike destroyed 25
NEWARK, N. J.—Warehouses of Lee, Reliable and Ludwig Baumann Furniture Companies..... 80
GREENWICH, CONN.—Home of M. P. Truesdale on Stanwich Road 25
PENDLETON, OREG.—Plant of Pendleton Provision & Packing Company 150
OSCELOA MILLS, PA.—Kristoff Building 30
BEAVER FALLS, PA.—Business building owned by Beaver Drug Company 35
LONG ISLAND CITY, N. Y.—Property at 357 Broadway.... 25
ROSCOE, PA.—Henry Parkins Furniture Company..... 25
AMBRIDGE, PA.—Conduit shop of Central Tube Company.. 40
PATERSON, N. J.—Dexter & Lambert Mill..... 200
LILLY, PA.—Half block of business buildings in Cleveland Street 55
ATLANTA, GA.—Plant of J. M. Karwisch Wagon Company.. 75
BURGETTSTOWN, PA.—Building owned by Joseph Jeffrey.. 25
HUNTINGTON, W. VA.—Grandstand at Tri-State Race Track. 25
CAMDEN, N. J.—Garage of Harry Kinsvater destroyed..... 25
WALLINGFORD, CONN.—Factory of W. A. Ives Company.. 190
ARMAGH, PA.—Elliott Building destroyed..... 25
MIDLAND, ONT.—Four business establishments and apartments above 50
NEW HAVEN, CONN.—Hotel Somerset, several cottages and garages at Bradley Point 40
PITTSBURGH, PA.—Duquesne Garden..... 25
TORONTO, ONT.—Plant of Dodge Brothers, Ltd..... 25
TAMPA, FLA.—Property of Courtney Brothers Produce Company 80
CUSHING, OKLA.—Cushing Refining & Gasoline Company.... 25
ASBURY PARK, N. J.—Flatiron Building and adjoining property 25
FLINT, MICH.—Three business buildings on East Second Street 650
JOHNSTOWN, PA.—Planing mill of W. J. Rose & Sons at Baumer 100
BEEBE PLAIN, VT.—Factory of B. B. Glove Mfg. Company destroyed 40
DOVER, DEL.—Residence of O. N. Purdy, Jr..... 250
VERSAILLES, ILL.—Business establishments destroyed..... 40
STILLWATER, MINN.—Colonel R. F. Hersey mansion..... 25
WEST PATERSON, N. J.—Main Building of L. E. Carpenter Company 125
BUFFALO, N. Y.—Clubhouse of Wanakah Country Club destroyed 25
GREENSBORO, N. C.—Several floors in Dixie Fire Insurance Bldg. 150
BEDFORD VILLAGE, N. Y.—Hotel in Bedford Village Park destroyed 250
CHELSEA, MASS.—Five story apartment block..... 40
BEDFORD, N. Y.—Hotel of James Weill destroyed..... 70
GALLIPOLIS, OHIO.—Store, church and dwelling destroyed.. 25
OSHKOSH, WISC.—Property of Buckstaff Company..... 50
BUFFALO, N. Y.—Building under construction for Fairmont Creamery 50
SOUTHAMPTON, L. I. N. Y.—Cottages of T. Monell, A. T. Brice and E. Swayne of New York..... 60
ROCKLAND LAKE, N. Y.—Property destroyed, through spread of forest fires..... 100
MOBILE, ALA.—Building at 15 N. Royal Street and adjoining property 85
ROME, GA.—Dormitory of the Berry Schools destroyed..... 60
POPLAR BLUFF, MO.—Duncan Office Building..... 100
PORTLAND, ORE.—Building at 5th and Morrison Streets.... 25
WILKES-BARRE, PA.—Levene Shoe Store destroyed. Establishment of Charles Guzzy, Landmesser Bldg..... 85
ELMIRA, N. Y.—Elmira Burial Case Company warehouse destroyed 25
ELKTON, IND.—Howard Hotel destroyed..... 50
MONTICELLO, N. Y.—Two business establishments..... 40
RICHMOND, VA.—Weisberger Store, Broad street..... 40

From reports covering the United States and Canada, the estimated losses by fire in the week ended April 30, 1926, aggregated $6,838,000, as compared with $7,069,700 for the corresponding week in 1925:

WILMINGTON, DEL.—Timber tract, Palmers Mills and other buildings 450
WEST MONROE, LA.—Seed house of Union Oil Mills destroyed 200
HELENA, MONT.—Hardware department of Helena Hardware Company 70
TORONTO, ONT.—Portion of Berg Building..... 100
NASHVILLE, TENN.—Residences of L. J. Loventhal and W. Keith, Sr..... 25
WALKERTON, VA.—Mattaponi pickle factory..... 25
CAMBRIDGE, MASS.—Manufacturing building in Albany Street occupied by six establishments..... 85
MUNCIE, IND.—Six establishments in Anthony Block..... 40
AVON, N. Y.—Warehouse of Niagara, Lockport & Ontario Power Company 25
ST. CATHARINES, ONT.—Grand Theatre destroyed..... 100
RUMSON, N. J.—"Old Oaks" residence of H. S. Borden..... 200
TILTONSVILLE, OHIO.—Five residences and several business houses 25
OSHKOSH, WISC.—Warehouse of McMillen Sash & Door Company 25
PEORIA, ILL.—Schilling Pipe Works, South Adams Street... 25
MARION, IND.—Marion Hotel, Fifth & Boots Streets..... 30
TOPEKA, KANS.—Highland Park School destroyed..... 30
ZION, KY.—Tipple of Zion Coal Mine..... 25
DETROIT, MICH.—Club at St. Clair Flats destroyed..... 80
CORINTH, MISS.—Property of Corinth Brick Company..... 75
CHESTER, S. C.—Weaver & McMillan Department Store..... 25
NORWICH, CONN.—Plaut Cadden Company..... 35
ELMER, N. J.—Two business establishments and two dwellings 25
HOMESTEAD, PA.—Store and apartment building, Eighth Avenue 25
EAST PROVIDENCE, R. I.—Property on farm of A. J. Kent, Barrington Rd. 80
BADGER, S. D.—Four business houses..... 25
HUNTINGTON, W. VA.—Warehouse of Mootz Feed Company 60
CARTERET, N. J.—Acid Plant of Armour Fertilizer Works.. 150
NEW YORK, N. Y.—Warehouse of Deutsch Brothers destroyed 400
AKRON, OHIO.—Home of Charles Reymann, East Market Street 40
BEECH GROVE, ILL.—Two elevators of Cleveland Grain & Milling Co. 185
DAHLGREEN, ILL.—Dahlgreen Mill destroyed..... 40
CHICAGO, ILL.—Building at 1011-25 S. California Avenue... 170
SOUTH BEND, IND.—Home on Kelly Estate, seven miles south 25
MINNEAPOLIS, MINN.—Yards of Bennett-Bailey Lumber Company 170
NASHVILLE, TENN.—Several stores and small warehouses... 30
MADISON, WISC.—Building on Farm of William James..... 25
TAMPA, FLA.—Building occupied by four business establishments 60
CORONA, N. Y.—Interior of Corona Palace (club house)..... 25
MINOA, N. Y.—Railroad Y. M. C. A. building destroyed..... 40
RUSHFORD, N. Y.—Block mill of L. C. McElheny destroyed... 40
PITTSBURGH, PA.—Duquesne Garden (a skating rink)..... 25
ST. PETERSBURG, FLA.—North Side Auto Storage Garage.. 60
SUSQUEHANNA, PA.—Lumber yarn and surrounding property. 85
GREELEY, COLO.—Store of J. V. Smith & Son..... 25
MOBILE, ALA.—Building occupied by Vann Restaurant..... 100
LOWVILLE, N. Y.—Plant of the Philadelphia Baking Company 40
MARIETTA, GA.—Property of Brumby Chair Company destroyed 85
CLEARWATER, FLA.—Building in business district..... 85
WAUKEGAN, ILL.—Johns-Manville Building 250
FAIRMONT, ILL.—Two business houses, club house and residence 30
PIEDMONT, MO.—Three stores damaged 65
RICHMOND, VA.—Plant of Tradgar Iron Works 30
FALL RIVER, MASS.—Building occupied by Algonquin Printing Company 25
GRAFTON, W. VA.—Tygart Valley Glass Company factory destroyed 85
NORWICH, CONN.—Cadden Company 30
KANSAS CITY, MO.—Garage of Kansas City Telephone Company & Contents 40
SALEM, N. Y.—Portion of J. B. Campbell Mfg. Company plant 80
LAKEPORT, CALIF.—Entire block in business district 80
JAMESBURG, N. J.—Factory of Shapanka Brothers 85
HOWARDSVILLE, VA.—Residence of B. F. Averill and surrounding property 65
MARKED TREE, ARK.—Business block in Elm Street..... 70
SAN FRANCISCO, CALIF.—College of Physicians & Surgeons.. 40
EAST CHICAGO, ILL.—Grocery store of Andrew Vozar..... 30
PHILADELPHIA, PA.—Paper warehouse of Samuel Rose, W. Hagert Street 40
Building occupied by Ator Oil Company..... 25
BALTIMORE, MD.—Fertilizer plant of American Agricultural & Chemical Company at Canton..... 65
CHICAGO, ILL.—Freight offices of Chicago, Burlington & Quincy and the Colorado & Southern Railroads 250



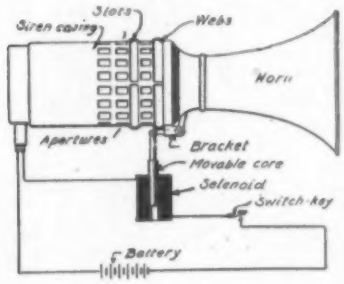
Seagrave 750-gal. triple combination car in use in the fire department of Manchester, Mass. The apparatus is equipped with an 80-gal. booster tank and 1,000-foot hose body.

Recent Patents

Descriptions of Patents Recently Issued of Interest to Fire Departments—Signaling Siren—Fire Escape—Extinguisher

Signaling Siren

A signaling siren has been patented (No. 1,520,225) by Austin B. Cosgrove and William H. Lewis of Mountain Lakes, N. J. The object of the design is to provide a means for producing a series of shrill sounds and which does not require that the siren wheel be abruptly stopped by some kind of break arrangement.



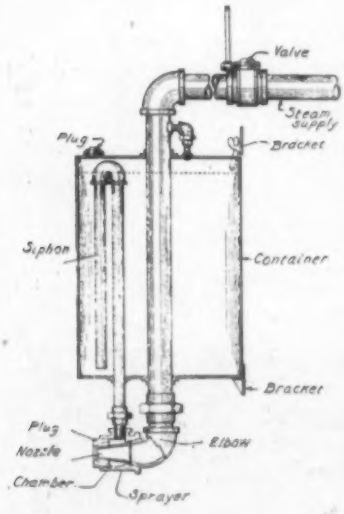
At one end of the siren casing there is a motor not shown, and from this motor there extends a shaft through a suitable bearing. The side walls of the siren casing are provided with alternately spaced circumferential slots and annular series of radial sound producing apertures. The radial portions are connected with spaced accentuated webs.

A bell crank is pivoted to a bracket and one arm extends into the amplifier through a slot in the same. The bell crank lever may be operated by either manual means or by a solenoid. The movable core is connected to the bell crank and the winding is arranged in series in the motor actuating circuit. When the switch key is manipulated to close the circuit, the solenoid will be energized to exert a pull on the core thereby swinging the arm of the bell crank to shift the rotor rearwardly and make the device to register.

By the arrangement, when the motor has attained its proper speed, by actuating this arm, the siren will emit a shrill signal when the proper ports are brought into registry. The old method of having to break the speed of the motor in order to sound a series of shrill blasts, is thus eliminated.

Fire Extinguisher

A design of a fire extinguisher which will operate a steam and fire extinguishing liquid has been patented (No. 1,568,536) by Samuel S. Schwab of Toledo, Ohio.



The steam is used in this extinguisher to furnish the pressure to carry the liquid to all parts of the room. Some source of steam supply is connected to the device by a pipe in which is located an opening valve for permitting steam to enter the apparatus. A valve controls the supply of steam which enters the container.

The container is filled with a fire-extinguishing solution such as carbon tetrachloride. In order to fill the container the plug on the top of the left side of the container is removed. A siphon is located in the container and is formed of a pair of pipes to form a U tube.

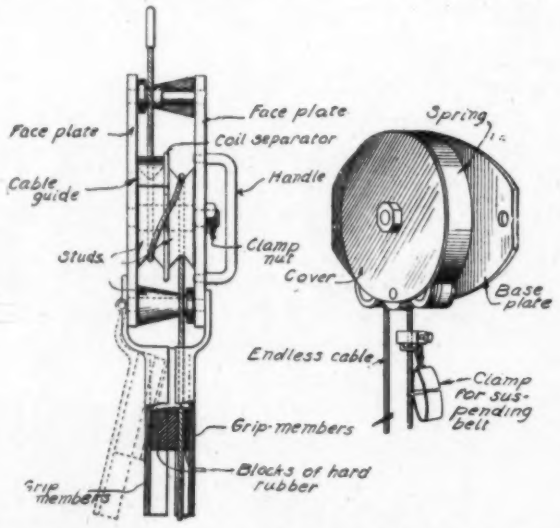
The sprayer is formed of a cone shaped nozzle that is located in front of an elbow which is secured to the lower end of the main pipe below the container. The nozzle forms a chamber between the nozzle and the wall of the shell to which the siphon is connected. A plug threads into the shell to form an outlet for the mixed vapor and steam.

When the valve is opened, the steam passes down through the pipe and it will draw liquid from the container through the siphon; the mixture will be distributed throughout the room in which the apparatus is located. In order to secure immediate action of the apparatus, the top of the container is connected to the main pipe by means of a by-pass. This will bring the pressure within the pipe to the surface of the liquid. The liquid is heated by the steam that it comes in contact with and the fire-extinguishing effect of the liquid, it is claimed, is increased. The steam itself is a fire extinguishing agent, and together with the carbon tetrachloride forms a better fire extinguishing medium.

Fire Escape

A patent (No. 1,578,108) has been granted to Neuman Tobias of Kingston, Jamaica, for a design of a portable fire escape.

At the left of the illustration is a side elevation of some of the parts of the invention with certain sections broken away to



show the arrangement more clearly. At the right is a perspective view of the endless cable embodiment.

To an endless cable is attached a suitable clamp for suspending a belt or other appliance for fastening to the person or object to be served. There is a base plate with means for fastening it to the floor or some place convenient to the point of egress.

The outer end of the stud which is mounted on the plate and is threaded to receive a nut for holding the cover plate is split for a T-head terminus. A roller is made split to balance the action of the portions of each half and facilitates the assembling and taking apart of the various parts.

A pair of rollers are mounted between the lower forked ends of a spring. Midway between the rollers but of sufficiently small diameter to permit a limited play of the suspended spring is a roller on a stud.

In operation, a person is strapped under the arm pits and leaps from the window—the down pull of the cable carrying such a strap causes sufficient resistance to be set up to make the descent slow and easy—the time of the descent is practically irrespective of the weight of the object. A clutch action is also set up. The person being lowered may regulate the speed of his descent by manipulating the uprunning length of cable.

The face plates are secured by means of a central shaft or stud which may be riveted to the plate. There is an auxiliary friction controller consisting of a pair of relatively movable grip-members, the former of which is secured to the plate, and the latter is mounted pivotally.

Anchored in place are blocks of hard rubber which act as drags on the cable which passes by the blocks. The one using the escape grips both of the grip members and by squeezing the members together it is possible to slow the descent and even stop altogether.

When Considering New Apparatus

Remember that BUFFALO equipment is

1. Built to Your Order to Meet Your Particular Needs
2. Fully Guaranteed to Do the Work for Which Designed
3. Making-Good and Making Friends Wherever in Service
4. Designed by Experienced Fire Apparatus Engineers
5. Built by Skilled Workmen in a New Modern Factory
6. Constructed of the Finest Materials Money Can Buy
7. High Quality Fire Apparatus at a Reasonable Cost

May We Send You Complete Information?

BUFFALO FIRE APPLIANCE CORP.

Main Office and Factory, Buffalo, N. Y.

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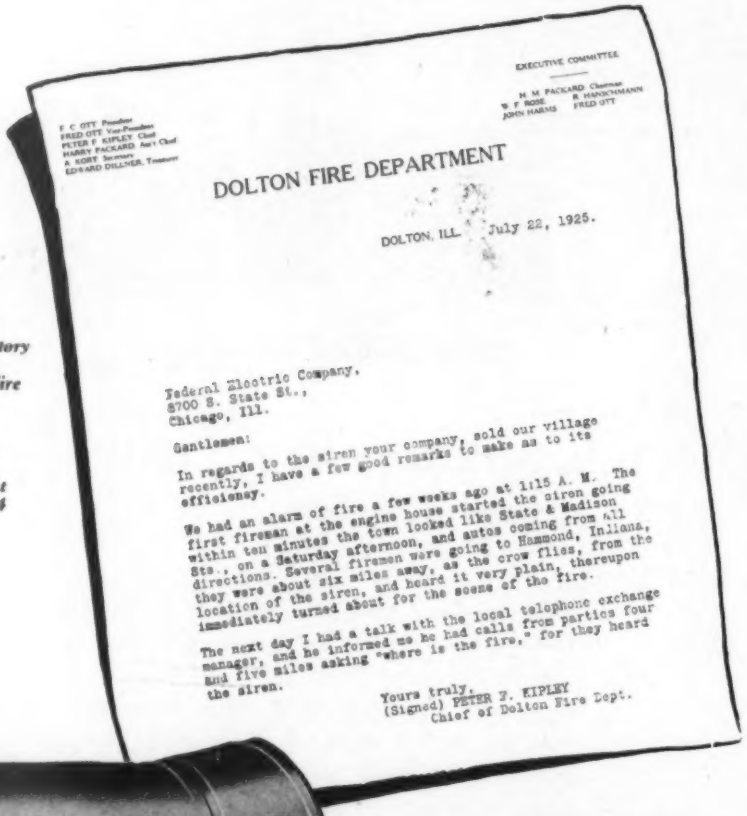


DOLTON FIRE DEPARTMENT

DOLTON, ILL. July 22, 1925.

Federal Electric Company,
8700 S. State St.,
Chicago, Ill.

Gentlemen:

In regards to the siren your company sold our village recently, I have a few good remarks to make as to its efficiency.

We had an alarm of fire a few weeks ago at 1:15 A. M. The first fireman at the engine house started the siren going within ten minutes the town looked like State & Madison Sts., on a Saturday afternoon, and autos coming from all directions. Several firemen were going to Hammond, Indiana, they were about six miles away, as the crow flies, from the location of the siren, and heard it very plain, thereupon immediately turned about for the scene of the fire.

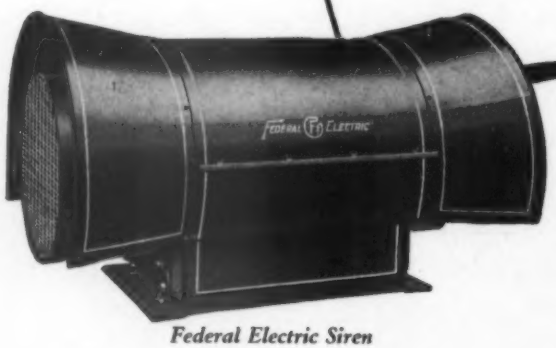
The next day I had a talk with the local telephone exchange manager, and he informed me he had calls from parties four and five miles asking "where is the fire," for they heard the siren.

Yours truly,
(Signed) PETER F. KIPLEY
Chief of Dolton Fire Dept.

Approved by the Underwriters' Laboratory of the National Board of Fire Underwriters

Approval dated October 11, 1918

Code control patent allowed April, 1924



Federal Electric Siren

It gets instant attention day or night—always heard—always recognized. Its weird cry gets your men on the job quickly, when seconds count—pays for itself many times in keeping down fire loss and insurance rates.

Mail Coupon Now

FEDERAL ELECTRIC COMPANY, 8700 South State Street, Chicago, Illinois

☐*Please Send Full Information and Prices* or ☐*Please Send Representative. We Have*.....*Fire Boxes*

Name.....*Official Position*.....

Street and Number.....*City*..... *State*.....

Our Council Meets.....*Our Town Has*.....*Population*

Our Current Specification.....*Volts*.....*Cycles*.....*Phase. Make of Box*.....

FE 5

OF INTEREST TO VOLUNTEER FIRE DEPARTMENTS

Good Way to Handle Brush Fires

No two chiefs perhaps, would attack a brush fire in the same manner, and while there could not be a standard method, it is doubtful if this one can be improved upon. Every town has a street sprinkler of several hundred gallons capacity, which may be hooked up behind an ordinary auto truck provided with a rotary pump of 200 gallons capacity and carrying 1,000 ft. of 2½-inch hose. The sprinkler is connected with a line of 2½-inch hose. Added to this equipment should be at least a dozen pails, six three-gallon extinguishers, two tin boilers, six shovels and three five-gallon hand pumps. With this paraphernalia any rural fire department can subdue a very vigorous brush fire without much trouble.

Southern N. Y., Firemen Meet in June

Plans are being rapidly formulated for the entertainment of the members at the annual convention of the Southern New York Volunteer Firemen's Association to be held this year in Islip, L. I., N. Y., on June 22 and 23. The convention will end with a large tournament on June 24.

Rev. Joseph R. Alten, president of the association, reports that a number of new companies have joined during the past year, and that the organization has shown signs of a healthy growth.

The committee in charge of the tournament report that there is every indication to hope that there will be a large number of prizes for the winners of the various firemanic competitions.

Aiding Rural Districts Fight Fire

Practically every fire department that makes it a rule to answer calls for help from outside communities, has a call system peculiarly its own. One method that has worked quite satisfactorily, provides for a certain number of blasts on the fire alarm, which brings the same number of blasts on the electric siren, and is a signal calling firemen to the station. A wheel with a number is placed on the alarm system, this number also being sounded on the electric siren, denotes the source from which the call comes. When a sufficient number of men reach the fire station, the best piece of apparatus is immediately sent to the scene of the fire. Experience shows that three minutes are required to reach the street after a call has been made. As many as half a dozen firemen are often on the apparatus when it leaves the station. Unlike many instances, this system does not require permission to be had from a higher official, to take the engine outside the city. A card shows to whom the company reports on arriving at a destination. Firemen who are left at the station look after the reserve apparatus until the responding company returns. In all cases the community thus aided is supposed to reimburse the benefactor for the service.

COVERS EXPOSURES FOR TWO HOURS; SAVES ROW OF FRAME COTTAGES

Los Angeles Firemen Have Unique Experience in Protecting Exposed Buildings but Not Operating on Fire

THE usual stages in operating at fires are: first, covering exposures; second, closing in on the fire; and third, extinguishing the fire.

But some companies of the Los Angeles fire department had quite a remarkable experience recently in performing only the first of these three operations. The nature of the fire was such that it was useless to attempt to extinguish the fire or even close in upon it. All that could be done was to cover exposures.

The department had lines in operation covering exposed frame cottages across the street for five hours—from 9 p. m. to 2 a. m. It all came about as follows: A broken gas pipe line sent a blast of gas up through the pavement of one of the residential sections. The gas became ignited by a passing automobile and shot flames high into the air. It threatened to destroy a block of the residential section. Firemen concentrated their efforts on covering exposures in preventing the

Spectacular Effect of Gas Main Blaze at Los Angeles. Note Height of Blaze and Intensity of Heat as Evidenced by Burning Poles.

fire from extending to the dwellings by fighting from behind boxes and other forms of obstructions which served as shields.

To makes matters more severe, the danger was increased by the presence of high tension wires on wooden poles. These poles became ignited and the department had to occasionally direct their attention toward extinguishing fire thereon.

The department proceeded in an admirable manner in keeping the dwellings cooled until such time as the gas company's men were on hand to shut off the gas supply and make repairs.

Program, 30th Annual Meeting, N. F. P. A.

The thirtieth annual meeting of the National Fire Protection Association, International, is to be held in Vernon Room, on the second floor of Haddon Hall, Chalfonte-Haddon Hall Hotels, Atlantic City, N. J., on May 10 to 13. Registration commences on Monday, May 10, at 9 a. m., and there is a reception committee, under the chairmanship of Percy Bugbee, to attend to the wants of all members and help extend acquaintanceship among the members. In the program which follows the reports printed with an asterisk (*) are preprinted as "advance reports," and they will not be read at the meetings. The program is as follows:

MONDAY, MAY 10

Committee Meetings

Several committee meetings will be held Monday morning. All interested members are invited to attend the following:

10.00 a. m. Fire Prevention Week.
10.00 a. m. Dust Explosion Hazards.
10.00 a. m. Hazardous Chemicals and Explosives.
10.30 a. m. Manufacturing Risks and Special Hazards.
11.00 a. m. Pyrotechnics.
12.00 m. Salvaging Operations.

Opening Session, 2.30 p.m. Sharp.

1. Roll Call—2.30 p. m.
2. President's Address—2.35 p. m.
3. Resolutions—Appointment of Committee—2.50 p. m.
4. Report of the Executive Committee—2.55 p. m.
5. *Treasurer's Report—3.05 p. m.
6. Report of the Secretary—3.10 p. m.
7. Membership Committee Report—3.30 p. m. Charles E. Meek (New York), Chairman.
8. Canadian Committee Report—3.45 p. m. George H. Greenfield (Montreal), Chairman.
9. Public Information—Committee Report—3.55 p. m. Franklin H. Wentworth (Boston), Chairman.
10. Report from U. S. Joint Fire Prevention Committee—4.15 p. m. Frank C. Jordan, Chairman. Jay W. Stevens, Vice-Chairman. American Water Works Association: A. W. Cuddeback, J. E. Gibson, Nicholas S. Hill, Jr., Harry F. Huy, F. C. Jordan. International Association of Fire Engineers: Sherwood Brockwell, George L. Johnson, J. J. O'Brien, R. J. Scott, J. W. Stevens. National Fire Protection Association: Geo. W. Booth, H. A. Burnham, H. L. Miner, Franklin H. Wentworth, Sidney J. Williams.
11. Report from Canadian Joint Fire Prevention Committee—4.25 p. m. W. H. Alderson, Chairman. George F. Lewis, Secretary. Canadian Manufacturers' Association: W. H. Alderson, George Brigden, Arthur Hewitt. Canadian Division, American Water Works Association: Wm. Gore, A. U. Sanderson, Norman R. Wilson. Dominion Association of Fire Chiefs: James Armstrong, A. C. Cameron, Wallace T. James. National Fire Protection Association: George H. Greenfield, John B. Laidlaw, George F. Lewis.
12. Five-minute Reports from Organization Members on Their Fire Prevention Activities—4.35 p. m.
13. Motion Pictures to be taken of all Members and Delegates Present—5.30 p. m.

Evening Session, 8 o'clock

14. *Hazardous Chemicals and Explosives—Committee Report—8.00 p. m. A. H. Nuckolls (Chicago), Chairman.

This committee presents minor revisions to the Regulations Governing Nitro-Cellulose Motion Picture Film. There is also presented as a tentative report a table of the common hazardous chemicals, including data on the fire and life hazard, recommended methods of storage, shipping containers and Interstate Commerce Commission label. This table has been prepared in co-operation with the American Chemical Society.

15. Pyrotechnics—Committee Report—8.15 p. m. Geo. W. Elliott (Philadelphia), Chairman.

This report will discuss the fire and life hazard incident to the use of fireworks on the Fourth of July and for other celebrations.

16. Reports from N. F. P. A. Representatives on Committees of the American Engineering Standards Committee—8.30 p. m. (a) A. R. Small, A. E. S. C. Executive Committee; (b) Ira Hoagland, Identification of Piping Systems; (c) C. J. Krieger, Zinc Coating of Iron and Steel; (d) D. J. Price, Conveyors and Conveying Machinery.

Representatives on other A. E. S. C. committees will report later in the program when N. F. P. A. committee reports on related subjects are being discussed.

17. *Gases—Committee Report—8.55 p. m. H. E. Newell (New York), Chairman.

This committee presents revisions of the regulations for gasoline vapor lighting systems and also submits for tentative adoption the proposed Regulations on Compressed Gas for Lighting and Heating, which have been presented as a progress report during the past two years. In connection with this report the chairman of the committee will present his reports as N. F. P. A. representative on the American Engineering Standards Committee, Sectional Committees on Gas Safety Code and on Mechanical Refrigeration Safety Code.

18. *Dust Explosion Hazards—Committee Report—9.15 p. m. D. J. Price (Washington), Chairman.

This committee presents minor revisions applicable to several of the regulations under its jurisdiction and presents for final adoption the Regulations for the Prevention of Dust Explosions in Starch Factories, which were tentatively adopted last year. The chairman of the committee will make a statement of the action taken in submitting the reports of this committee for registration as A. E. S. C. standards, the N. F. P. A. acting as joint sponsor with the U. S. Department of Agriculture.

19. Fire Prevention Week—Committee Report—9.35 p. m. T. Alfred Fleming (New York), Chairman.

This report and the discussion following will deal with the accomplishments of Fire Prevention Week, 1925, and plans for the 1926 campaign.

20. Adjourned Discussion—10.00 p. m.

TUESDAY, MAY 11.

Morning Session, 9.45 Sharp.

21. *Flammable Liquids—Committee Report—9.45 a. m. H. L. Miner (Wilmington, Del.), Chairman; H. E. Newell (New York), Secretary.

This committee presents revisions in the Regulations on Oil Burning Equipments. The feature of special interest is the proposed permission in domestic oil burning equipments to permit 275 gallon tanks (with certain specified safeguards) to feed burners by gravity flow, whereas the previous limit was 60 gallons. A similar recommendation was made in last year's report, but was not adopted by the Association at that time. A progress report on gasoline tank trucks is presented for the purpose of securing criticisms that will be helpful to the committee during the ensuing year.

22. Laws and Ordinances—Committee Report—*Suggested Flammable Liquids Ordinance—10.20 a. m. Franklin H. Wentworth (Boston), Chairman.

This committee presents the suggested ordinance for the use, handling, storage and sale of flammable liquids, revised in accordance with the recommendations of the Committee on Flammable Liquids. The section dealing with the location of above-ground storage tanks has the unanimous approval of the Committee on Flammable Liquids.

23. Fire Protection of Oil Properties—10.40 a. m. Address by C. H. Haupt (Member N. F. P. A.), Chief Engineer, Standard Oil Company of New Jersey.

24. *Manufacturing Risks and Special Hazards—Committee Report—11.05 a. m. Jos. G. Hubbell (Chicago), Chairman.

This committee presents a revised report on paint spraying and spray booths which in its original form appears as a section of the Regulations on Dip Tanks, edition of 1922. The present revisions are intended to make these rules applicable to pyroxylin finishes as well as to ordinary paints and varnishes. The committee also presents revisions in the Regulations on Foam Extinguisher Systems and makes mention of the brochure on Lumber and Lumber Drying including steam jets.

25. *Protection of Records—Committee Report—11.35 a. m. H. P. Weaver (Philadelphia), Chairman.

This report contains specifications for vaults (both ground and structure-supported) and vault doors. The report also goes further into the subject of destruction of records no longer useful, the question which was discussed in some detail in the 1925 report.

26. Adjourned Discussion—12.05 p. m.

Afternoon Session, 2.30 o'clock

27. Salvaging Operations—Committee Report—2.30 p. m. Edward R. Hardy (New York), Chairman.

This committee, which has not previously reported to the Association, will present a progress report.

28. Round Table Discussion—Problems of the Fire Commissioner—2.40 p. m.

Ten-minute addresses by leading fire commissioner on topics of current interest will be followed by general discussion open to all members and guests present.

29. The N. F. P. A. Field Service—3.50 p. m. (a) Report by Percy Bugbee, Field Engineer; (b) Report by H. L. Bond, Field Engineer.

30. Hose Cart Operation Contest—5.15 p. m. In Yard of Hotel Chalfonte.

8.00 p. m. Meeting of Committee on Farm Fire Protection.

Organization meeting to outline the scope of the work of this new committee and to lay out a program. All interested members are invited to attend.

WEDNESDAY, MAY 12.

Morning Session, 9.45 Sharp.

31. *Building Construction—Committee Report—9.45 a. m. Chas. E. Paul (Chicago), Chairman; F. H. Alcott, Jr. (New York), Secretary.

This committee reports on standard industrial buildings, presenting a general introduction and sections dealing with heavy timber and concrete construction. Other divisions of this subject are deferred until next year's report.

32. *Protection of Openings in Walls and Partitions—Committee Report—10.10 a. m. J. A. Neale (Chicago), Chairman.

This report presents minor amendments to the Regulations on Protection of Openings in Walls and Partitions Against Fire.

(*Continued on page* 480)

DARLING
Gate Valves *for* Underground Service

Guarantees Faithful Performance

Darling Gate Valves were not placed upon the market until a study had been made of the then existing types and their failings overcome.

The resulting Darling Valve is a marvel of mechanical simplicity, ingenuity and operation. They more than justify their slightly increased cost by their amazingly long life and freedom from repairs. In hundreds of municipalities and towns Darling Gate Valves are demonstrating their worth. This service record is worth looking into.

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Greater COMFORT in— GMC Big Brute

NEVER before has a driver had a cab like this. *In just a moment he can enclose himself completely*—without shutting off his view of the road or traffic, and without leaving his seat.

The bottom panel slides down, the upper panel up—opening the cab completely. Nothing is in the way of the driver when the cab is open.

An all Steel Fisher Cab

—which can be completely closed, or opened, in a moments time. A comfortable "coupe" for the driver. *And that means increased efficiency.*

Real Seats

—built with Marshall Cushion Springs, both seat and back completely upholstered in Spanish type Fabricoid. The seats are adjustable.

One Piece Windshield

—clear vision type, with automatic windshield wiper. **The driver can see where he is going,** and what is coming, without straining his neck.

Complete Electric Lighting —Magneto Ignition

—each independent of the other. Electric head lamps, with both bright and dim connections, electric tail lamp, electric dash lamp, truck type generator and battery.

Easier to Steer

The steering gear is a worm and split nut type—irreversible—with a big, corrugated steering wheel. **It's as easy to steer Big Brute as to steer a small pleasure car.** The tie rod is *back* of the axle—positively protected from damage through accident.

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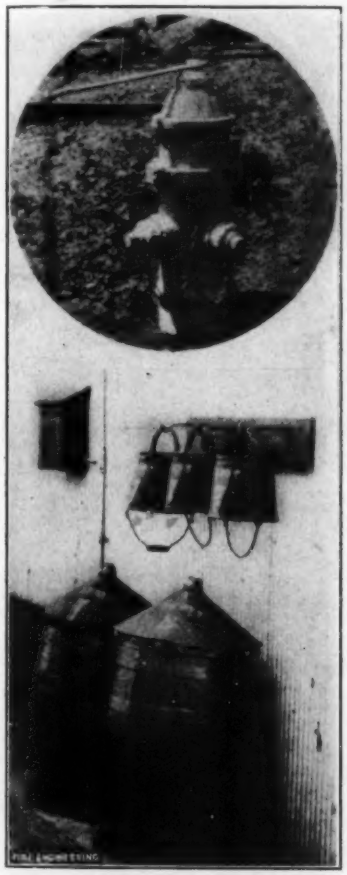
INDUSTRIAL PLANT PROTECTION

Fire-Fighting Methods in a Plant Brigade

By J. M. KLIPFEL,
Chief Engineer of Plant and Chief of Fire Department, Rochester, N. Y., Works, Vacuum Oil Company

Fire is our common enemy.

The sound of the alarm or the shrill note of the siren on the fire apparatus never fails to grip us with the fear that our own homes or our own places of business, or the lives and property of our friends may be in the power of this great enemy.



Upper, A Wrench is Always in Position on Each Hydrant. Lower, Straps on Pails not only Help the Users to Aim Well, but Make Them Useless for Other than Fire-fighting Purposes.

America's contribution to Fire is appalling. In one year—1923—fifteen thousand persons lost their lives due to fire. More than half a billion dollars worth of property was destroyed. Some statistician has figured that our fire toll that year—and that year was not extraordinary one way or the other—was more than sixteen dollars a second.

What can we do about this fire menace?

We have three lines of defense.

The first is, of course, not to let fires start. That is vastly important, and it is something in which every one can have a part. Too much of America's half billion dollar fire bill is due to sheer carelessness. Too much of it is due to the lack of ordinary, reasonable precaution.

Our second line of defense is by minimizing the use of combustible material and by using construction of such character that fire, if it does start, cannot easily spread.

The third line of defense is in having means of extinguishing, speedily and surely, fires which do start. This includes which is sometimes called our fourth line of defense—stopping fires as soon as they start. In our plants we endeavor to eliminate the causes of fire by constantly keeping in mind the need of the greatest care on the part of every worker. We endeavor to build so that a little fire cannot spread into a big one. We also endeavor to have at hand modern fire fighting equipment and men trained in their use.

The system used in our Rochester works and followed at our other plants has been worked out carefully, and we feel prepared for the Fire Enemy if our works are ever unfortunate enough to be visited.

Perhaps the oldest and commonest type of fire fighting appliance is the water bucket and barrel. The barrels are placed at easily accessible places and are kept filled. The buckets have rigid straps on the bottom, so that they are useless for any but their proper use. This strap also helps the user to throw a bucketful of water easily and accurately. To prevent stagnation a small quantity of carbolic acid is placed in each barrel. Freezing is prevented by the addition of calcium chloride.

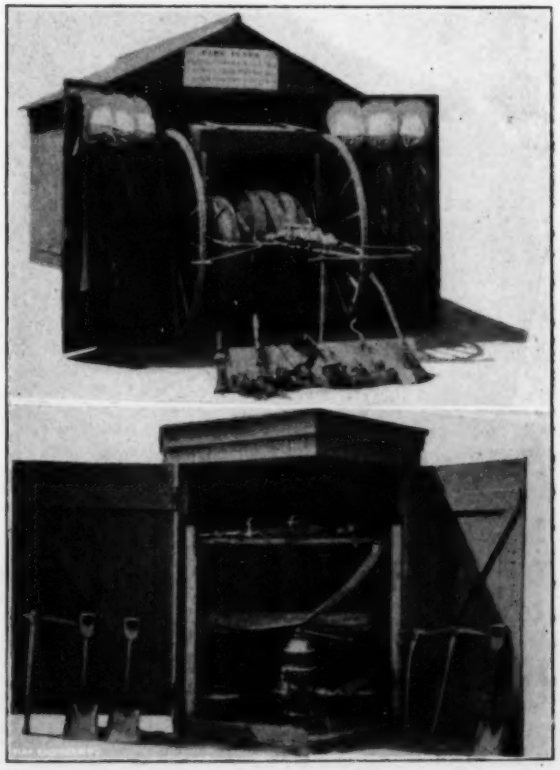
Sand is highly desirable where oil fires are concerned and drums of sand together with shovels and buckets will be found in the work where there is danger of fires of that nature. The drums are fourteen inches in diameter and twenty-eight inches high. Sand is heavy and one man might find it difficult to upset a heavier drum, so that he could easily get at the fire-smothering material.

The modern fire extinguisher is valuable in stopping little fires, while they are yet little fires. Three kinds are used in Rochester. One is soda and acid type, holding two and one-half gallons of soda solution. When the extinguisher is turned upside down the soda and acid combine, forming carbon dioxide gas. This gas in sufficient quantities will smother fire, but its principal duty is to provide adequate pressure to force the liquid out of the extinguisher in a powerful stream. The extinguishers of this type we use are capable of putting out small blazes before they get much headway.

Another type is the carbon tetrachloride extinguisher. The extinguisher of this type which is pumped by the user, contains sufficient of this fire destroying chemical to master small blazes. The tetrachloride extinguishers are particularly valuable for electrical fires, as the liquid is a non-conductor for current and voltages commonly used. Experimenters have used tetrachloride extinguishers with safety on voltages as high as 70,000.

The foam extinguisher is especially valuable in fighting oil fires. It spreads a blanket of foam, looking like thick, brownish soap suds, over the burning substance. The foam is composed of millions of tiny bubbles, each filled with carbon dioxide gas, and cuts off the air which any fire must have if it is to continue to be a fire.

All of our extinguishers are inspected frequently and are recharged annually. They are placed near exits, and in passage ways which are unobstructed and are traversed by watchmen.



Upper, Each Hose Cart has Its Own House. Lower, This Hydrant is Perpetually Ready for Business.

A wide band is painted above each extinguisher, so that it can easily be located. Usually this band is red.

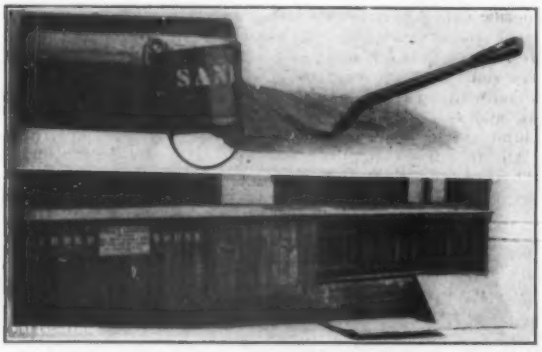
However, if a fire gets very far a plentiful supply of water is essential. All over the works will be found standpipes, each with 50 feet of standard fire hose attached. The hose we use is interchangeable with the hose used by the Rochester fire department. Other hose may thus be added, so that the standpipe may be used in neighboring buildings.

Each hose has what is called a "shut off" nozzle. This turns the water off when it is desired to drag the hose, but gives the full force instantly when desired. Spanners are kept in each valve hand wheel where they are ready when needed.

In the open throughout the works are many hydrants, each with a combination hydrant and spanner wrench always in position. These hydrants are threaded to fit the Rochester fire department hose, so that the city firemen will not be handicapped if circumstances make it necessary for them to work in the yard. The hydrants are painted a bright yellow—that color being particularly easy to see. Another color is used in combination when hydrants are connected to different water supplies.

In some cases it is advisable to have hose ready attached to these hydrants. In that case a housing is built over hydrant and hose. The houses, placed near buildings considered especially dangerous due to type of construction or to the combustible nature of materials stored in them, contain pails of sand, and picks and shovels for trenching and throwing up banks. Each hydrant has two plugs, the unused plug carrying a gate valve, so that a second line of hose can be attached without stopping the flow from the first. The house in the picture carries 200 feet of hose ready for use.

However, fires can't be counted upon to start only near a



Upper, When Sand is Needed the Container is Upset. Lower, Ladders are Protected from the Elements, but Can be Taken Out in a Jiffy.

hose house or standpipes, and the fire house is essential. Each fire house shelters a hand hose cart on which is 300 feet of standard hose. There is a holder by which one man can play a stream up to 100 pounds pressure. An extra nozzle is carried as are a variety of other appliances. For example each cart carries life belts by which firemen may strap themselves to ladders and other straps by which the hose may be strapped to ladders or other supports.

In several places in the yard, ladders and pike poles are stored, They can easily be taken out as the entire front of the housing shown in one of the pictures is quickly removable. The ladders are regulation trussed type, and may be used either end up or either way about.

Milwaukee to Enlarge Repair Shops

The fire commissioners of Milwaukee, Wis., have authorized Chief Peter Steinkellner to enlarge the fire department repair shops. Under the chief's plan, arrangements will be made to assemble fire apparatus on truck chassis in the enlarged shops. Pumps and other equipment will be purchased and mounted on their own chassis.

According to this plan of operation, Chief Steinkellner believes that it will effect a saving to the city of $30,000 a year.

Leetsdale, Pa., Ex-Chief Presented with Watch—Upon the retirement of Dr. J. R. Quaid as chief of the fire department of Leetsdale, Pa., following twenty-one years of service, thirteen of which was served as chief, the members presented him with a white gold Howard watch, and a Masonic charm.

Gary Chief Retires; Successor Appointed

The fire department of Gary, Ind., has a new head. Chief Wilfred Grant, who for many years directed the destinies of the department, stepped down on April 16, and was succeeded by one of his assistants, Frank Parkey.

Ex-Chief Wilfred Grant, Gary, Ind.

The veteran chief has been contemplating this and at last decided to take the necessary steps for retirement, so that he could take matters easy, after his long and strenuous career as a fire-fighter.

Chief Grant began his firemanic career by joining the South Bend, Ind., Fire Department, a volunteer organization back in 1885. The following year, 1886, it became a paid fire department. Chief Grant worked his way up through the various grades in South Bend, until, in 1902, he was appointed as its head.

He served for 12 years in this capacity, and in March, 1914, he received the appointment as chief of the Gary, Ind., Fire Department, and removed to that city.

For twelve years and two months, and until his retirement he has been at the head of the Gary Fire Department, and has seen it grow in strength and efficiency. He now has turned over to his successor a unit as near perfection as it is possible for any fire department to be.

Chief Frank Parkey, who succeeds Chief Grant, is a thorough and painstaking fire-fighter. He joined the Gary Fire Department as a chauffeur on April 28, 1913. After serving four years the first promotion came to him on August 16, 1917, when he was made a captain. Two years after this he was again advanced, this time to the post of assistant chief, the date of his appointment being April 1, 1919.

He served in this capacity until his appointment on April 16, as head of the Gary Fire Department. Chief Parkey is only 36 years of age, which places him in the ranks of the younger chiefs of the country.

Chief Frank Parkey, Gary, Ind.

Railroad Association Issues Hand Book

The Railway Fire Protection Association has issued a hand book covering the various items that enter into the problem of railway fire protection.

It is a loose leaf book bound in black fabricoid cover and contains 312 pages of valuable information. Many of the rules and regulations adopted by commerce commissions and inspection agencies have been included. The book is divided into the main divisions of common fire hazards, special fire hazards, transportation hazards, special occupancies or risks, and a large section on fire protection.

The book is exceedingly valuable for those entrusted with that phase of fire protection work.

COSMOPOLITAN

The Utmost in Reliability for the Smaller Communities

The new Cosmopolitan brings big city protection to the small community.

This powerful six cylinder chassis is equipped with the famous American–LaFrance Rotary Gear Pump, identical in operation with the pumps used on large fire equipment. The hose body is of large capacity and permits the carrying of 1,000 feet of 2½-inch fire hose.

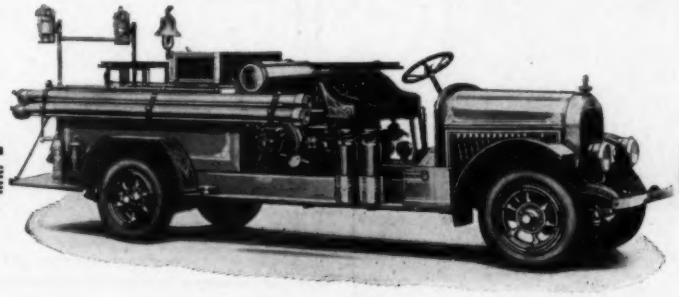
It is mounted with a 40-gallon chemical tank.

Smaller communities desiring a high grade fire protection at a price they can afford to pay will find the Cosmopolitan ideally suited to their requirements.

AMERICAN-LAFRANCE FIRE ENGINE COMPANY, INC.

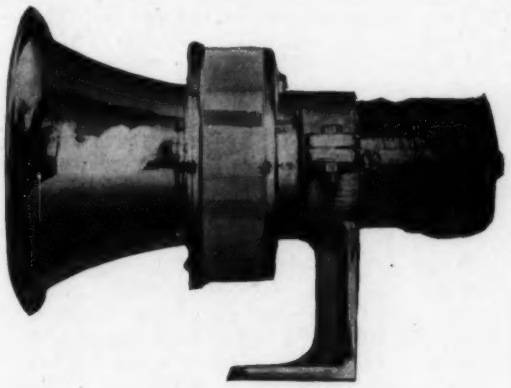
ELMIRA, N. Y.

Branches: New York, Boston, Atlanta, Philadelphia, Baltimore, Denver, Minneapolis, Portland, Pittsburgh, Chicago, Dallas, Canadian Factory: Toronto, Ont., San Francisco, Kansas City, Mo., Los Angeles



C.A.M. Sirens

are better sirens



They are designed solely for emergency signalling and are unsurpassed for ruggedness of construction, simplicity and accessibility of parts.

They are built to give service and to endure.

Bronze is used where bronze serves best; likewise with other metals.

C. A. M. Sirens may well be classed as aristocrats in the siren field. They are "quality" sirens.

If you are in the market for the best that can be built in the way of electric fire apparatus sirens, get in touch with us. Write for bulletins.

C. A. M. Manufacturing Company

802 Humboldt Bank Building San Francisco, California

The Signal for Fire Service

Long-lasting, washproof and *dressy*. The cloth is either best quality TubTesT chambray, or TubTesT dark blue percale. The shirt is guaranteed to wash without losing color or fit.

The detachable laundered collars save washing and make one shirt give the service of two. You don't have to wash this Signal every time the collar is soiled; you simply change collars.

A *dressy* service shirt like this is what you need. Men look and feel "dressed up" in this Signal. The best way to improve the appearance of your department is to specify the two-collar style. In some cities this has been done. Write for samples.

SIGNAL SHIRT COMPANY
Racine, Wisconsin

UNION MADE

Signal
SUPERLATIVE QUALITY
REG. U.S. PAT. OFF.

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BADGES

of Every Description

QUALITY GUARANTEED

Right Prices
Prompt Deliveries

We Also Make the Durable

"ROSS" HELMET

Our latest catalogue and price list will gladly be sent on request.

EVERSON-ROSS CO., INC.
88 Chambers St., New York

FALSE ALARMS

"LOUIE"

By WILLIAM HENRY FERBER,
Chief, Volunteer Fire Department,
Campbellsport, Wis.

Louis wasn't good for much, come to
boil 'im down—
Just a good-for-nothin', loafin' 'bout
the town,
Stealin' watermelons from the den and
apples from the tree,
He wasn't worth a gol dum, far as
anyone could see,
'Til he joined the firemen's crew, then
he lay awake at night,
And was always "Johnny-on-the-Spot"
when there was fire to fight.
He would fight just like a Titan, and
no danger did he know,
For he'd rush into a buildin' where no
other lad would go.
He clum upon the steepest roof, and
kept the surface wet;
He defied the smoke and deadly fumes
where the acid drums were set;
He went into a burnin' buildin' and
saved a child from death,
Swallowed smoke and fumes and flame
'til it overcame his breath—
Then he fell prostrate on the floor,
while the flames around him plied,
And in that blazin' hot Inferno, "unser
lieber Louie" died;
Died at his post, on duty-call, just like
other heroes die,
While the bells peal out the death knell,
and the red glow paints the sky.

Chief Ferber dedicates this tribute to the valor of the many citizens who join the volunteer fire department in a small town and give their all to save the lives and property of their neighbors.

At one time "Louie" was known as Campbellsport's "bad boy." His voluntary service as a firefighter did not attract much attention, and the plaudits came after Death claimed him in the line of duty, too late to reward his indomitable spirit.

No man knows how suddenly, by force of circumstances, he may be called on to serve as a volunteer fireman. Involuntarily, unprepared, perhaps, he must fight for his own as best he can regardless of personal danger —*Industrial Fire Chief.*

SLIGHTLY MIXED

An old-timer on the Long Beach Fire Department left last summer on a long-planned trip to Wisconsin to visit the "old-timers" back there. After an extended visit he returned by the way of Oregon and Washington. Arriving at the fire station, one of the men asked, "Well, Pat, you had quite a trip, didn't you? How did you come back, by the way of the Pacific-Northwest?"

Pat, who had never had the opportunity of much railroad travel, quickly retorted with no little dignity, "No. Great Northern."—*Contributed by E. D. Barnett, Long Beach F. D.*

A spinster living in a London suburb was shocked at the language used by a captain and a fireman who were at work at a fire directly across the street from her house.

She wrote the chief of the department on the matter and the captain was asked to report.

This he did in the following way:—

"Me and Fireman Murphy were at work on this job. I sent Murphy up a ladder with an axe, and he dropped it down hitting me on the foot. Then I said: "You really must be more careful Murphy."

Fire Commissioner (at trial): Captain Mulligan you are charged with having thrown Fireman Smith out the window.

Captain Mulligan: "I did it in a moment of abstraction."

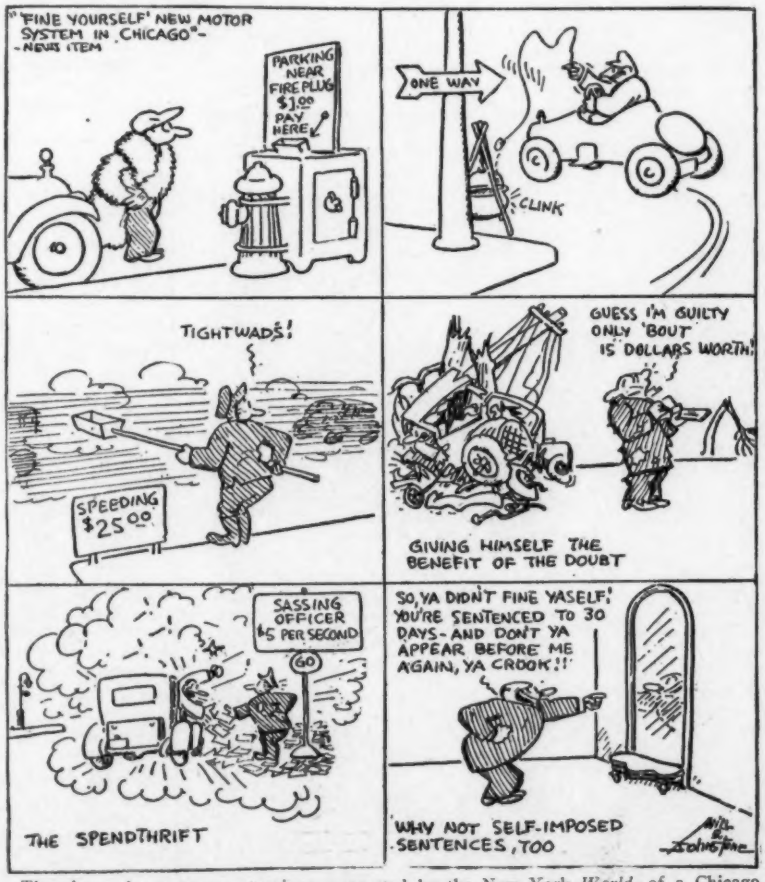
Commissioner: "Be more careful in the future. You may do it when somebody happens to be passing!"

SPEAKING OF TRAFFIC

"That's the most profitable device we have in town," remarked the Mayor to his visiting friend, as he pointed out the automatic stop-go signal at the main intersection.

"Autos forget to stop for it sometimes?" inquired the guest.

"No, not so much that, but you see that hydrant on the corner? Well, quick as an auto stops for the signal, we get him for parking in front of the hydrant."
—*American Legion Weekly*


"FINE YOURSELF' NEW MOTOR SYSTEM IN CHICAGO"- -NEWS ITEM
PARKING NEAR FIRE PLUG $1.00 PAY HERE!
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CLINK
TIGHTWADS!
SPEEDING $25.00
GUESS I'M GUILTY ONLY 'BOUT 15 DOLLARS WORTH!
GIVING HIMSELF THE BENEFIT OF THE DOUBT
SASSING OFFICER $5 PER SECOND
60
THE SPENDTHRIFT
SO, YA DIDN'T FINE YASELF! YOU'RE SENTENCED TO 30 DAYS - AND DON'T YA APPEAR BEFORE ME AGAIN, YA CROOK!!
WHY NOT SELF-IMPOSED SENTENCES, TOO

The above shows some extensions, suggested by the New York *World*, of a Chicago traffic plan, by which the motorist violating minor laws, is compelled to fine himself and thus save the county much expense and himself much time and annoyance.

FIRE DEPARTMENT ACTIVITIES

Aerial Ladder for Ocean City, N. J.—An Ahrens-Fox aerial ladder has been added to Ocean City, N. J. The chief and city officials were pleased with the tests.

Wheeling, W. Va., May Purchase Pumper—The council Wheeling, W. Va., is considering the purchase of a 750-gallon pumper.

What Cheer, Ia., Awards Certificates—The department at What Cheer, Ia., has awarded certificates to its members who have served for ten years or more.

Asbestos Suits Prove of Value—The plan of firemen wearing asbestos suits has proven of value in fighting an oil fire which recently swept over the Los Cerritos oil field at Long Beach, Cal.

Newton, Mass., Uses Snow to Quench Fire—The first grass fire of the year at Newton, Mass., was extinguished by shoveling snow from a shaded place where it was six feet deep, and throwing it in the path of the flames.

Nyack, N. Y., Fire Patrol Holds Election—Everett Bush was elected president of the Nyack, N. Y., fire patrol. Refreshments were served and a social hour followed the election—William P. Babcock is captain of the patrol.

George F. Cobb of Massachusetts Returns from Trip—George F. Cobb, traffic manager of the Massachusetts Fire Chiefs' Club has returned to Boston after a month's trip to the West Indies and Bermuda.

Two-Platoon System in Muscatine, Ia.—The two-platoon system was inaugurated in Muscatine, Ia. Several men have been added to the department; the men will work 24 hours and will then have 24 hours off.

New Fire Company for Los Angeles, Cal.—A new fire company is being organized in Los Angeles, Cal., to give protection to the recently added district of Green Meadows. It will be known as Engine No. 64.

New Chief for Medina, N. Y.—James Schooley has been appointed chief of Medina, N. Y., to succeed Chief Weller who resigned to join the staff of the Gamewell Fire Alarm Company.

Colorado Springs, Col., to Have Drill Tower—Construction has started on a drill tower which is being erected at the central fire station of Colorado Springs, Col. The tower will be completed at a cost of not exceeding $1,500.

Haverhill, Mass., Considers Improvements—Chief William H. Hawkins and members of the city council have conferred on plans for improving the fire department. The purchase of a pumper is being considered.

Red Oak, Ia., Celebrates Anniversary—The fire department of Red Oak, Ia., has celebrated its fiftieth anniversary of its organization. It was organized in 1875, following a large fire in which a large portion of a square was destroyed.

St. Joseph, Mo., Demonstrates Work—A demonstration of rescue work was made by the firemen of St. Joseph, Mo., at a busy street intersection. An eighty-five-foot aerial ladder was used in conveying two firemen to safety from a supposedly burning building.

Property Added to Battle Creek, Mich.—Because of the annexation of Washington Heights to the city proper, Battle Creek, Mich., department has been augmented by some additional equipment and the city is the owner of additional real estate.

Recent Deliveries of Ahrens-Fox Apparatus—The following recent deliveries of Ahrens-Fox pumpers are reported: 1,000-gallon to Atlantic City, N. J., Orange, N. J., Port Chester, N. Y., Perth Amboy, N. J., Ocean Grove, N. J., and a 750-gallon pumper to Hatboro, Pa.

Fire Medal Presented to Dog—The people of Middleton, presented a beautiful silver medal to a dog in recognition of the animal sounding a fire alarm by his incessant barking during the evening of March 10. The medal is worn by the dog on his collar.

Philadelphia, Pa., Has Efficient Repair Shop—It costs Philadelphia, Pa., about $100,000 a year to operate its repair shop. A force of 125 men is maintained in all three of the repair shops. The repair department has been developed into an important adjunct.

Seagrave Makes New England Deliveries—The following deliveries of Seagrave fire apparatus has been made in New England territory: City service ladder truck to Hull, Mass.; 2 750-gallon pumpers for Medford, Mass.; 400-gallon Suburbanite for W. Springfield, Mass.; combination chemical and hose squad car for Brockton, Mass.

Perkasie, Pa., Firemen Killed in Test Run—Once each month, the firemen of Perkasie, Pa., have a trial run. They do not know when the run will occur as an alarm is turned in, in the regular way. While answering one of these alarms, the machine skidded and the sixteen men on the truck were hurt—two of the crew were killed.

Believe Dangers From Film Fires Have Passed—Chief John M. Healy believes that the motion picture exchanges of Denver, Col., are protected by as perfect a system as can be found anywhere. At present they are as immune from fire, as it is possible to be. Frequent fire drills are held in the exchanges and every fire precautionary measure known is used.

Companies Combine for Vaudeville Show—A musical entertainment and vaudeville show was presented in the Andrew Square fire station, Boston, Mass.—the entertainment was given by members of Ladder 20 and Engine 43. The fire apparatus was moved to the street to give a large space for the audience. Several times during the evening the firemen were called to answer fire alarms.

Georgetown Squirrels Cause Large Fire Damage—Some squirrels in Georgetown, Mass., were responsible for the spread of fire which destroyed the large part of one of the homes there. The owner of the place was burning some dried grass, and shortly afterward discovered the house on fire. Some squirrels had made their winter home at one of the water spouts at the corner of the house and it was filled with dried leaves and grass. The fire spread to this and then communicated to the roof.

When W. Palm Beach Band Plays, Fire Occurs—It seems that every time the West Palm Beach, Fla., band plays, something starts to burn. When the band was playing "There'll be a Hot Time in the Old Town Tonight," the Breaker Hotel burned to the ground. Some time in March, the band played, "Keep the Home Fires Burning" and a $25,000 warehouse burned to the ground. The following day, it played "Red Hot Mama" and flames burst forth in some private hospital.

Fire Alarm Notes

Riverside, N. J., Tests System—The new fire alarm system of Riverside, N. J., consisting of a siren and fifteen boxes was tested and found satisfactory.

Sirens Installed in Fond du Lac, Wis., Schools—More than thirty sirens have been installed in the public schools of Fond du Lac, Wis. In addition, fire alarm boxes to operate the sirens have been erected in the schools.

New Equipment for Cedar Rapids, Ia.—All framework is in place for the installation of a panel which was received, and the trunk lines for the fire alarm system have been installed.

Honesdale, Pa., Considers Fire Alarm—Honesdale, Pa., is considering some substitute for the present gong installed at the electrical light plant. The station will soon be abandoned and it will be necessary to find other means for sending the alarms.

Roxbury, Mass., Troubled by False Alarms—Many false alarms have been coming in from the Roxbury, and Dorchester, Mass, sections. There is considerable worry expressed over the number of these alarms which, it is feared, may make the firemen more lax in their duties.

Kansas City System Taken Over—The new fire alarm system of Kansas City, Mo., has been officially placed in service. The system has been approved and inspected by members of the National Board of Fire Underwriters, and the United States Automatic Fire Alarm Company has guaranteed maintenance for six months. The final payment of $110,883 has been ordered paid. Extra costs involved in the construction have been paid out of the fire department fund.

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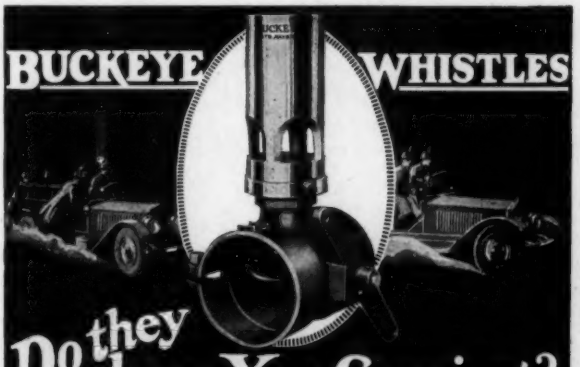

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PROPOSED IMPROVEMENTS

San Juan (P. O. name San Juan Bautista), San Benito Co., Cal.—Fire department considering purchase of new chemical engine.

Half Moon Bay, San Mateo Co., Cal.—Volunteer fire department was organized with Frank Fetter as chief.

Fall Brook, San Diego Co., Cal.—Ernest R. Childs, County Surveyor, stated that hose must be purchased for fire department.

El Centro, Imperial Co., Cal.—Resolution was presented for the purchase of additional equipment for the fire department.

Oceanside, San Diego Co., Cal.—Oceanside Volunteer Fire Department was organized into that of a regulation fire department to be known as Oceanside Engine Co. No. 1. Ernest E. White, chief.

Fortuna, Humboldt Co., Cal.—At election held recently it was voted in favor of a $1,000 bond issue for fire apparatus.

Waterloo, Black Hawk Co., Iowa.—All schools may be equipped with fire extinguishers in the near future.

Clinton, Hunterdon Co., N. J.—The amount of $6,500 was included in the yearly budget for the purchase of motorized fire appartus.

Knowlesville, Orleans Co., N. Y.—Movement on foot to secure a volunteer fire department for this village; apparatus and other equipment to be purchased.

Snoqualmie, King Co., Wash.—New fire house to be erected.

Alta Vista, Chickasaw Co., Iowa.—Fire department was organized with Harvey Vick as chief.

Creston, Union Co., Iowa.—Council voted in favor of the purchase of apparatus for fire department.

Delphos, Allen Co., Ohio.—Chief Frank Grothouse requested City Council to make an appropriation of $1,000 for purchase of additional fire hose.

Akron, Summit Co., Ohio.—City Council approved the issuance of $30,000 worth of bonds for the purchase of two new pumpers for the fire department.

Glen Olden, Delaware Co., Pa.—Bids were returned unopened because it was felt that it might effect bond issue for other city improvements. No new date has been decided upon but it will probably be soon after the primary election. H. L. Simon, Secretary of Borough Council.

Gordon, Schuylkill Co., Pa.—The Gordon Fire Company to purchase apparatus.

Versailles (Mail McKeesport), Allegheny Co., Pa.—Funds being raised for purchase of new fire apparatus.

Clarendon, Arlington Co., Va.—Funds being raised for the purpose of increasing fire fighting facilities.

Rice Lake, Barron Co., Wis.—Plans being discussed for purchase of new motorized fire appartus. Kearney Jacobson, chief.

Riverside, Riverside Co., Cal.—Present site of station sold; new fire station to be erected.

San Bruno, San Mateo Co., Cal.—City manager recommended purchase of 2½-tons chassis equipped for fighting grass fires.

Knights Landing (P. O. Grafton), Yolo Co., Cal.—Discussing purchase of fire equipment.

Colfax, Jasper Co., Iowa.—Funds being raised for the purchase of fire apparatus.

Cambridge, Dorchester Co., Md.—New fire station to be erected.

Dodge Center, Dodge Co., Minn.—Plans made to organize fire department.

Cokato, Wright Co., Minn.—Funds being raised for purchase of fire apparatus.

Woodbury, Gloucester Co., N. J.—Chief Rothermel of Verga Fire Company agitating for purchase of fire apparatus to take care of city's expansion.

Trenton, N. J.—New fire headquarters to be erected; J. Osborne Hunt, architect.

Fort Plain, Montgomery Co., N. Y.—Considering purchase of fire apparatus.

Delta, Fulton Co., Ohio.—Council voted to purchase fire apparatus.

Morrisville, Bucks Co., Pa.—Discussing construction of new fire station.

Columbus, Warren Co., Pa.—Mansfield township voted to purchase four-tank chemical engine.

Port Allegany, McKean Co., Pa.—City contemplating purchase of fire apparatus.

Somerset, Somerset Co., Pa.—Ordinance drafted for $30,000 bond issue for purchase of fire apparatus.

Darby, Delaware Co., Pa.—The Borough of Glenolden has drafted an ordinance for the purchase of triple combination car.

Orange, Essex Co., N. J.—Ordinance passed by City Commission providing $13,650 for purchase of triple combination car.

Riverside, Burlington Co., N. J.—Pumper to be purchased for fire department at cost of $13,000.

Belford, Monmouth Co., N. J.—Chemical Company plans the purchase of new apparatus.

New Brunswick, Middlesex Co., N. J.—Fire department contemplating purchase of additional equipment.

Bridgewater, Bucks Co., Pa.—Fire department raising funds for purchase of apparatus.

Topton, Berks Co., Pa.—New pumper to be purchased for fire department.

Girardville, Schuylkill Co., Pa.—The Ranger Hose Company raising funds for purchase of new apparatus.

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CONVENTION DATES

May 19–20—NATIONAL FIREMEN'S ASSOCIATION. 28th Annual Convention, Chicago, Ill. Secretary, Captain J. L. Mersch, 715 Monroe Street, Evanston, Ill.

June 8–10—HUDSON VALLEY VOLUNTEER FIREMEN'S ASSOCIATION. 37th Annual Convention, Port Jervis, N. Y. Secretary, Chief Chris W. Noll, Fire Department, Poughkeepsie, N. Y.

June 8-10—OHIO FIRE CHIEFS' ASSOCIATION. 9th Annual Convention, Warren, Ohio. Secretary, Chief Philip J. Harty, Youngstown Sheet and Tube Company, Youngstown, Ohio.

June 9–11—MARYLAND STATE FIREMEN'S ASSOCIATION, 34th Annual Convention, Westminster, Md. Secretary, George R. Lindsay, Hagerstown, Md.

June 10–12—ARIZONA STATE FIREMEN'S ASSOCIATION, 3rd Annual Convention, Prescott, Arizona. Secretary-Treasurer, Chief W. J. Nemeck, Douglas, Ariz.

June 11–12—LEBANON COUNTY FIREMEN'S ASSOCIATION, Annual Convention, Myerstown, Pa. Secretary, William I. Kutz, Box 233, Myerstown, Pa.

June 16–18—NEW YORK STATE ASSOCIATION OF FIRE CHIEFS. 20th Annual Convention, Hotel Van Curler, Schenectady, N. Y. Secretary-Treasurer, Chief James H Golden, Fire Department, Cohoes, N. Y.

June 16–19—WISCONSIN STATE FIREMEN'S ASSOCIATION. 39th Annual Convention, and Tournament, Cedarburg, Wis. Recording Secretary, E. Philip Mueller, Jefferson, Wis. State Organizer, Chief H. H. Niemeyer, Portage.

June 21–23—OREGON STATE FIRE CHIEFS' ASSOCIATION. Annual Convention, Corvallis, Ore.

June 22–24—NEW ENGLAND ASSOCIATION OF FIRE CHIEFS. Fourth Annual Convention, Hotel Carpenter, Corner Merrimack and Franklin Sts., Manchester, N. H. Exhibit Hall, New Hampshire State Armory. Secretary, Chief John W. O'Hearn, Watertown, Mass. Chairman, Exhibit Com., Chief Henry H. Heitman, Waterbury, Conn.

June 22–24—SOUTHERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 31st Annual Convention and Tournament, Islip, Long Island, N. Y. Secretary, August Kalb, 27 N. Centre Ave., Rockville Centre, L. I.

June 24–25—SOUTH CAROLINA STATE FIREMEN'S ASSOCIATION. 21st Annual Convention, Charleston, S. C. Secretary, R. S. Hood, Sumter.

July 13–15—MICHIGAN STATE FIREMEN'S ASSOCIATION. 52nd Annual Convention, Caro, Mich. Secretary, H. L. Williams, Ludington, Mich.

July 14—DELAWARE STATE VOLUNTEER FIREMEN'S ASSOCIATION. 6th Annual Convention, New Castle, New Castle County, Del. Secretary, Sam H. Carson, Dover. President, Geo. Clifton Maull, Lewes.

July 21–22—CENTRAL NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. 33rd Annual Convention and Parade, Endicott, N. Y. Secretary, Millwood Fitch, Moravia, N. Y. Secretary, Local Committee, Floyd L. Jackson, Endicott.

July 26–28—MONTANA STATE FIREMEN'S ASSOCIATION. 35th Annual Convention, Big Timber, Mont. Secretary, D. E. Moser, Bozeman, Mont.

July 27–28—WESTERN NEW YORK VOLUNTEER FIREMEN'S ASSOCIATION. Annual Convention, Kenmore, N. Y. Secretary, Henry A. Clark, 21 Porter Ave., Batavia, N. Y.

Aug.—CENTRAL PENNSYLVANIA VOLUNTEER FIREMEN'S ASSOCIATION. Annual Convention, Tyrone, Pa.

Aug. 9–14—WESTERN PENNSYLVANIA FIREMEN'S ASSOCIATION. 33rd Annual Convention, New Kensington, Pa. Secretary, Convention Committee, R. A. Kanouff, New Kensington.

Aug. 16–18—UTAH STATE FIREMEN'S ASSOCIATION. Annual Convention, and Tournament, Park City, Utah. Secretary, Fred Peters, Murray, Utah.

Aug. 16–19—FIREMEN'S ASSOCIATION OF THE STATE OF NEW YORK. 54th Annual Convention, Alexandria Bay, N. Y. Secretary, Fred A. Davis, Fort Edward, N. Y.; Treasurer, William H. Swartwout, 115 Main Street, Ossining, N. Y.

Aug. 19–20—CONNECTICUT STATE FIREMEN'S ASSOCIATION. 43rd Annual Convention, Elks' Home, Washington St., New London, Conn. Secretary, D. W. Harford, South Norwalk.

Sept. 14–15—IOWA STATE FIREMEN'S ASSOCIATION, 49th Annual Convention, Manning, Ia. Secretary, E. E. Parsons, Marion.

Sept. 14–16—MASSACHUSETTS STATE FIREMEN'S ASSOCIATION. 47th Annual Convention, Fall River, Mass. Secretary, Daniel J. Looney, 1046 Old South Building, Boston, Mass.

Sept. 21–24—INTERNATIONAL ASSOCIATION OF MUNICIPAL ELECTRICIANS. 30th Annual Convention, Battery Park Hotel, Ashville, N. C. Secretary, William R. Arbuckle, Supt. Fire Alarm, Bayonne, N. J. Chairman Exhibit Committee, Daniel J. Morgan, Sales Engr., Hazard Mfg. Co., Wilkes-Barre, Pa.

Sept. 22–23—INDIANA STATE FIREMEN'S ASSOCIATION. 9th Annual Convention, Marion, Ind. Secretary, Frank H. Miller, Fire Headquarters, Terre Haute, Ind.

Sept. 24—NEW JERSEY FIRE CHIEFS' ASSOCIATION. Annual Convention, Atlantic City, N. J. Secretary, Fred A. Trowbridge, 17 South Street, Morristown, N. J.

Sept. 24–25—NEW JERSEY STATE FIREMEN'S ASSOCIATION. 49th Annual Convention, Atlantic City, N. J. Secretary, William Exall, Chamber of Commerce Building, Newark, N. J.

Sept. 27–29—ARKANSAS STATE FIREMEN'S ASSOCIATION. Annual Convention, Jonesboro, Ark. Date of meeting tentative. H. S. Compton, Secretary, Central Fire Station, Little Rock, Ark.

Sept. 27–29—KANSAS STATE FIRE CHIEFS' AND STATE FIREMEN'S ASSOCIATIONS. 10th and 39th Annual Conventions, respectively, Manhattan, Kan. Secretary, Chief K. D. Doyle, Wamego, Kan.

Oct. 5–7—FIREMEN'S ASSOCIATION OF THE STATE OF PENNSYLVANIA. Annual Convention, Philadelphia, Pa. Secretary, Charles F. Clark, 411 Bellevue Avenue, Wayne, Pa.

Oct. 12–15—PACIFIC COAST ASSOCIATION OF FIRE CHIEFS. 33rd Annual Convention Fresno Cal Secretary, Chief Jay W. Stevens, 1014 Merchants Exchange Building, San Francisco, Cal.

Oct. 19–22—INTERNATIONAL ASSOCIATION OF FIRE ENGINEERS, 54th Annual Convention, Hotel Roosevelt, New Orleans, La. Secretary, Chief James J. Mulcahy, Yonkers, N. Y. Chairman Exhibit Committee, Chief Wm. F. Daley, Brockton, Mass.

Oct. 20—OFFICERS' ASSO. FIRE PATROLS, SALVAGE CORPS AND PROTECTIVE DEPTS. OF U. S. AND CANADA. Meeting at New Orleans in connection with I. A. F. E. Convention. Secretary, John Ashmead, 76 William St., New York City.

Program, 30th Annual Meeting, N. F. P. A.

(*Continued from page* 468)

33. *Specifications for Fire Tests—Committee Report—10.20 a. m. Ira H. Woolson (New York), Chairman.

This committee is a Sectional Committee of the American Engineering Standards Committee for which the N. F. P. A. is one of the several joint sponsors, the other sponsors being the American Society for Testing Materials, the U. S. Bureau of Standards and the Fire Protection Group, including the Associated Factory Mutual Fire Insurance Companies, the National Board of Fire Underwriters and Underwriters' Laboratories. The report presents a revision of the standard time temperature curve and test specifications which were originally adopted by the N. F. P. A. at the 1918 annual meeting.

34. Farm Fire Protection—Committee Report—10.30 a. m. D. J. Price (Washington), Chairman.

This newly organized committee will present a preliminary report outlining it plans for future action.

35. *Safety to Life—Committee Report—10.40 a. m. Sidney J. Williams (Chicago), Chairman; R. S. Moulton (Boston), Secretary.

This committee with enlargement of its personnel acts as the Building Exits Code Committee of the American Engineering Standards Committee. This report presents new material on hospital fire and exit drills, submits for adoption a revised section on hospital exits and with minor revisions in other parts of the code asks authority to submit the code as revised to the A. E. S. C.

36. Piers and Wharves—Committee Report—11.10 a. m. Charles H. Fischer (New York), Chairman.

This committee presents an informative report discussing the fire experience on pier and wharf property since the adoption of the Regulations on Piers and Wharves at the 1924 annual meeting.

37. *Marine—Committee Report—11.20 a. m. Samuel D. McComb (New York), Chairman; A. J. Smith (New York), Secretary.

The committee presents revisions in the table of hazardous commodities and in the rules for internal combustion engines adopted last year and submits other minor revisions on which action is requested preparatory to printing a 1926 edition of the Regulations on Marine Fire Hazards. The chairman of the committee will report to the Association in his capacity of N. F. P. A. delegate to the American Marine Standards Committee. At the same time a report will be made on the A. E. S. C. Committee on Electrical Installations on Shipboard, S. D. McComb and A. R. Small, N. F. P. A. representatives.

38. U. S. Government Service to the Merchant Marine—11.55 a. m. Address by Hon. J. Walter Drake, Assistant Secretary, U. S. Department of Commerce.

39. Adjourned Discussion—12.20 a. m.

Special Marine Program

At Atlantic City Yacht Club situated at the Inlet. (About twenty minutes walk from Chalfonte-Haddon Hall.) Busses will be available for those who wish to ride and will leave Chalfonte-Haddon Hall at 2 p. m.

2.15 p. m. Assemble at Yacht Club for inspection of fire protection equipment of U. S. Coast Guard Cutter, patrol boats and new fireboat "Port Houston" built for the city of Houston.

2.45 p. m. Members board Coast Guard Cutter at Yacht Club Wharf for trip off shore to witness fire drill on board and pumping demonstration by fireboat "Port Houston."

3.45 p. m. Return to Yacht Club.

4.00 p. m. Demonstration of marine fire protection appliances at ball park (adjacent to Yacht Club) under auspices of the Atlantic City Fire Department.

Motion Pictures, 8.30 p.m.

(a) Hot Sparks. One-reel "Cameo" comedy, Educational Films, Inc.
(b) Arson. Film of Glens Falls Insurance Co. (Member N. F. P. A.)
(c) California Oil Fire. News film.
(d) Special Film contributed by Motion Picture Producers and Distributors of America (Member N. F. P. A.). Fire Prevention Messages from and pictures of members attending the convention.
(e) Hot Stuff, Two-reel "Spat Family" comedy. Pathé film.

THURSDAY, MAY 13.

Morning Session, 9.45 o'clock

40. Electrical Field Service—9.45 a. m. A. R. Small (New York), Chairman.

This committee directs the policies of the N. F. P. A. Electrical Field Service and will report briefly on the developments during the first year which this service has been in operation. A more detailed report will be made by the Electrical Field Secretary as the next item on the program.

41. Report of Electrical Field Secretary, W. J. Canada—9.55 a. m.

42. *Electrical Committee Report—10.20 a. m. A. R. Small (New York), Chairman.

This committee functions as a Sectional Committee of the American Engineering Standards Committee having jurisdiction over the National Electrical Code. This report presents revisions in the 1925 Code.

43. Reports of N. F. P. A. Representatives, A. E. S. C. Committees—10.45 a. m.
(a) Electrical Safety Code, W S. Boyd.
(b) Insulated Wires and Cables other than Telephone and Telegraph, A. H. Nuckolls.
(c) Radio, R. B. Shepard.

44. Electric Power Houses—Committee Report—10.55 a. m. A. M. Schoen (Atlanta), Chairman.

This new committee organized during the current year will present a progress report discussing plans for future action.

45. Electric Railway Car Houses and Cars—Committee Report—11.05 a. m. A. M. Schoen (Atlanta), Chairman.

This committee completed last year Regulations on Electric Railway Car Houses and Cars, but has been continued in order to give further attention to this and related subjects. The report presented will be informative.

46. Protection Against Lightning—Committee Report—11.15 a. m. A. M. Schoen (Atlanta), Chairman.

This committee having jurisdiction over the Lightning Safety Code coordinates the work of the N. F. P. A. and the committee of the American Engineering Standards Committee on the same subject. Chairman Schoen will report as N. F. P. A. representative to the A. E. S. C. committee.

47. *Signaling Systems—Committee Report—11.25 a. m. A. C. Hutson (New York), Chairman.

This committee presents revisions to the Regulations on Municipal Fire Alarm Systems and completely revised rules on Protective Signaling Systems.

48. Adjourned Discussion—12.00 m.

THURSDAY AFTERNOON, MAY 13

Final Session, 2.15 p.m.

49. *Automatic Sprinklers—Committee Report—2.15 p. m. F. B. Quackenboss (Nashville), Chairman.

This committee presents amendments to the Sprinkler Regulations.

50. *Fire Pumps—Committee Report—2.30 p. m. Ezra E. Clark (Boston), Chairman.

This committee presents amendments to the Regulations on Centrifugal Fire Pumps and Electrical Driving of Fire Pumps, including a new appendix on methods of determining suction pipe sizes.

51. *Field Practice—Committee Report—2.45 p. m. H. P. Smith (Hartford), Chairman.

This report includes revised Regulations for the Construction and Equipment of Hose Houses for Mill Yards, proposed amendments to the Regulations for the Installation of Standpipe and Hose Systems and minor amendments to the Regulations for First Aid Fire Appliances.

52. Private Fire Supplies from Public Mains—Committee Report—3.10 p. m. H. A. Burnham (Boston), Chairman.

This committee presents a progress report on its current work.

53. Hydrants, Valves and Pipe Fittings—Committee Report—3.15 p. m. C. W. Mowry (Boston), Chairman.

This committee presents an informative report discussing current activities. The chairman of the committee will report to the Association in his capacity of N. F. P. A. representative to Sectional Committees of the American Engineering Standards Committee on Pipe Flanges and Fittings and on Cast Iron Pipe.

54. *Tanks—Committee Report—3.25 p. m. C. D. Abbott (Boston), Chairman.

This committee presents a comprehensive report on gravity and pressure tanks, towers, etc., being a complete revision of the previous regulations on this subject and including new matter on the heating of tanks.

55. Report of Committee on Resolutions—3.45 p. m.

56. New Business.

57. Report of Nominating Committee and Election of Officers.

Connecticut Firemen Meet in August

The date for the 43rd annual convention of the Connecticut State Firemen's Association has been set as August 17 and 18, and the place of meeting is to be the Elk's Home, Washington Street, New London, Conn., according to advices received from D. W. Harford, secretary of the association. The program has not yet been entirely decided upon, but it is expected that it will fully conform to the high standard for which the conventions of this association are well known.

Chicago Debates Hollow Tile Construction

The adherents of building brick and those favoring the use of building tile are engaged in a bitter debate over the use of the latter, which has heretofore been prohibited by the Chicago building ordinances. Despite almost a year's effort on the part of Mayor Dever, a sub-committee of the City Council is still investigating the subject. Union labor forces are aligned against admitting hollow tile as a substitute for brick.

At a recent meeting at which fire insurance and fire protection were represented, John A. Neale, chief engineer of the Chicago Board of Underwriters, and Frank C. McAuliff, chief of the insurance patrol, related how a tile wall collapsed when a stream of water struck it during a recent fire. Another objection to the use of tile is the fact that manufacturers pay their men only $2.76 a day, as compared with $6 paid by the manufacturers of brick. Mayor Dever expresses himself in favor of the use of tile where brick is now specified in the ordinance, when used in certain types of construction.

Fort Myers, Fla., Plans Bond Issue—The city of Fort Myers, Fla., has approved a large bond issue in which are provisions for the improvement of the fire department.

Coatsville, Pa., Home Dedicated—A large delegation of firemen will attend the dedication of the new $80,000 home of the Brandywine Fire Company No. 2. A large parade will be one of the features.

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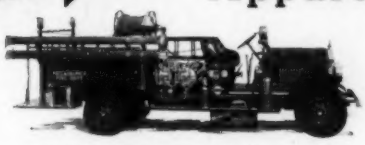

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CORRESPONDENCE

Purple Lights for Fire Alarm Standards in Milwaukee

To the Editor:

On page 314 of the March 25 issue of FIRE ENGINEERING there is an item relating to the installation of purple lights for fire alarm standards in Detroit. You may be interested to know that purple lights have been used for this purpose in Milwaukee since early in 1925. When signal lights were first experimented with in Milwaukee, red glass was used, but this color was abandoned because of frequent confusion with automobile tail lights. Green glass was substituted until the increasing installation of four corner traffic signals throughout the city made imperative the selection of another color. Both amber and various shades of purple were tried out, and purple was finally adopted and has been installed as fast as possible during the last year.

Yours very truly,
F. N. MCMILLIN,
Librarian, Municipal Reference Library.

Milwaukee, Wis., April 3, 1926.

Right to Abolish Wooden Shingles

To the Editor:

Perhaps it may be of interest to you and your readers to know that the New Jersey Supreme Court, in a recent case (Myers vs. State of N. J., and Henry Gautschy, building inspector, decided March 5, 1926 and reported in IV N. J. Miscellaneous Reports on page 251) upheld the right of a municipality to prohibit the replacement of shingle roofs within specified areas with new wooden shingles, or to allow new buildings to be so finished.

The borough of Hawthorne, N. J., passed an ordinance which reads in part as follows:

"Every building hereafter erected within the corporate limits shall have an incombustible roof covering and no existing wooden shingle roof, if damaged more than twenty-five per cent, shall be renewed with other than incombustible roof covering.

"The borough maintained that the authority to pass such an ordinance was granted to it by the Home Rule Act of 1917, page 354, which in subdivision N of paragraph 1 of article 14 authorizes the municipality to regulate and control the construction, erection, alteration and repair of buildings and structures of every kind."

In upholding the power of the borough to make such an ordinance, the court said "that the state has the power to limit the replacement of roofs wtih combustible materials in built-up communities we think clear. The roof is the one point of all buildings where ignition from fires is almost likely to occur. If inflammable, the danger is greatly magnified. Sparks lie there and eventually burst into flames. From the walls they fall to the ground and die. It is common knowledge that, pre-eminently, from this source great conflagrations spread."

The fine of fifty dollars imposed was sustained.

This decision may appear somewhat of a surprise, since New Jersey has invariably held the power of municipalities to restrict promiscuous building by means of zoning ordinances to be unconstitutional.

Yours truly,
HENRY W. PILCH.

A Plea for Cheaper Liability Rates

To the Editor:

We are an incorporated volunteer company with an active list of sixty members, owning outright all our equipment. At the present time, we have a Mack triple combination truck, type AB-3A with 400-gallon pump, and a smaller light truck with additional hose and equipment.

One of our worries at the present time is the expense of insurance against personal injuries or damage that our trucks might cause, if an accident should occur while the machine is responding to a fire, or while returning from one. We realize that usuaully in the case of an accident, the Courts have ruled that fire apparatus always has the right of way. This does not remove the danger of a bad accident and a heavy verdict for personal damages against us. We have no regular paid driver, but must rely on a few men assigned especially to drive. In these men we place all our confidence.

There is also the potential danger that an emergency driver, not accustomed to a heavy motor vehicle, will have to drive and that an accident will occur.

All these facts make it imperative that we carry liability insurance even though the department is in a town of less than 3,000 inhabitants and responds to between twelve and twenty calls a year. The insurance companies, however, class us as the same kind of a risk as a department in a large city with probably fifty calls in a year.

To us, this does not seem fair. We have not the attendant hazards of congestion of traffic, slippery asphalt streets or the blind streets which are ever present in the larger city. Our drivers, because of their lack of familiarity with the apparatus, are apt to be more cautious than the men who always drive a heavy truck. All in all, we feel that we are not receiving a fair rating.

What do any of your readers think, and can they give us the benefit of their experience in handling the insurance problem, in places where there is a volunteer fire department with problems similar to ours? On a $10,000 basis, with a property damage clause of $1,000, our rate is $192 a year. This is a heavy cost per mile when consideration is given to the fact that the apparatus only makes about twenty calls a year. This is a striking comparison to the owner of a heavy truck who may be operating twelve or fifteen hours nearly every day in the year.

Thanking you for any help that may come from this letter, I am,

Yours truly,
GEORGE C. SEELEY,
Foreman.

Editor's Note:

There are probably other towns that have been confronted with the same problem and who have found some solution to the situation. The editor would be pleased to hear from readers on this subject and will disseminate the information for the betterment of the fire-fighting fraternity.

Fire Tax on Insurance Premiums.

To the Editor:

The tax on insurance companies is one that is assessed by legislatures of the various states and is used for the maintenance of the fire departments' pension funds and relief association.

Out of the forty-eight states in the union, only twenty states have enacted into law, the tax against the insurance companies. In the twenty states which have the insurance tax the law is enforced, with one exception—Idaho. Due to that Idaho firemen are not in a position to build up their pension funds and relief association. They are unable therefore, to help the disabled and superannuated firemen who have given the best part of their lives to the service.

Twenty-eight years ago, the Merrill-Dryden bill was introduced into Congress for the control of the insurance business by the national government. If this bill became a law, the firemen would have received nothing as far as tax proceeds. At that time the National Firemen's Association was organized in Chicago, Ill. It was organized in Company 13, and the members financed sending a delegation to Washington to fight against the bill. The fight was successful and the firemen throughout the country are indebted to the association.

Another attempt was made a year later for national control of the insurance companies, and again the association was successful in having the plan pigeonholed.

A few years ago, the state legislature took away the insurance fund from the Ohio firemen. Last year the Illinois legislature considered the so-called "Dailey" bill. One of the objects of this bill was to take away the insurance tax from the firemen of that state. Due to the congestion attending the closing days of the legislature, the bill was not considered. Another attempt, will however be made to have this made law next year.

Now we hear the rumbling of a mighty endeavor to take the insurance tax away from all of the firemen's pension funds and relief associations in this country. We are given to understand that the National Chamber of Commerce will seek legislation, in 1927 in the State of Illinois, that will take the insurance tax away from the firemen.

At the present time we are in the dark about the proposed legislation. We have not been able to find out what organizations and interests are operating beneath the cloak of the National Chamber of Commerce. It may be that certain interests (unknown at this time) are also working in conjunction with the proponents of the "Dailey" bill.

At any rate the National Firemen's Association and the Illinois Firemen's Association will be ready to fight the proposed legislation. The battle has been going on for years and it will continue. At the present time the fight centers in Illinois and battle promises to be a real one—should the insurance tax be abolished in Illinois, then you can rest assured that the interests behind the move will continue the abolishment of the tax in every state of the union. The battle, therefore, is yours, for on the decision of the Illinois legislature rests the answer of whether or not your will be the next state to lose the insurance tax.

The question then resolves itself, "How can I help this fight —this fight which is for my interest?"

The answer is simple. Communicate with the officers of your

state association and prevail on them to get in touch with the officers of the National Firemen's Association.

The National Firemen's Association wants every state firemen's association to join in this fight which is just beginning and which may be carried into your state. In the states which have no firemen's organization, we invite the firemen to join with us as associate members. What we are after is the moral support.

Individually, we fight hard and alone. Collectively, it will be much easier. It is the only way that we can successfully wage our battles for this is the day of organization, and unless we are organized into one solid body, then our efforts will be all in vain.

Sincerely yours,
CAPT. J. E. MERSCH,
Secretary N. F. A., Evanston, Ill.

A New Book on Motor Fire Apparatus

"The Automobile Fire Operator's Handbook" is the title of a new 800 page book written by Robert H. McNeish, Automotive Engineer, and just published by the Times-Mirror Press of Los Angeles.

This book is the most comprehensive book ever issued on the subject of construction, care and operation of motor fire apparatus and meets a real need long felt in fire department circles.

Liberally illustrated, and provided with questions and answers on the various topics, it will prove of tremendous value to those men studying the construction and operation of motor fire apparatus either to fit themselves for this work or in preparation for examination for motor apparatus operators.

Quoting from the authors preface, "The purpose of this book is to give practical advice and assistance to operators of automobile fire apparatus and to those who desire to become operators; to give a more thorough understanding of the various parts, their functions and how to properly care for each part or unit."

In addition to enumerating the parts and illustrating them, the author has undertaken to describe them; to tell how they are made; the material entering into their construction; what operation each performs, and to get the best results from their operation.

For the thorough training of the student of automobile fire apparatus an exhaustive set of questions and answers has been incorporated, such as has been or are likely to be put to applicants when taking an examination for the position of automobile fire apparatus operator. The author has worded these questions and answers as they might be given, based upon practical experience of fire department requirements. These questions and answers cover almost every phase of automobile fire apparatus operation and no doubt will be found beneficial to the experienced operator as by the student; a large number are identical with those questions which have been asked of applicants for the position of fire apparatus operator at past civil service examinations throughout the country.

To further assist the reader in getting an adequate understanding of the duties of a fire apparatus operator, the author has applied a simplified set of rules and forms for the readers convenience as well as for other department members who may be interested.

A brief summary of the contents will give a better idea of the comprehensive scope of the book.

Part 1: Fire Apparatus Chassis and Equipment; the frame, engine, the clutch types, transmission, differential and axle types, axle housing, fuel supply and carburetion, cooling system, electrical equipment, lead-plate storage battery, Edison-alkaline storage battery, ignition, and battery charging.

Part 2: Questions and answers on the various topics treated in Part 1.

Part 3: Motor pumping engines and some latest improved motor pumping engines of various types; Ahrens-Fox Fire Apparatus, Seagrave Motor Fire Apparatus; American-La France Fire Apparatus; Mack Motor Fire Apparatus; Stutz Apparatus; with a complete list of questions on the preceding.

Part 4: Miscellaneous information and tables of use to the student of motor fire apparatus.

Part 5: Tables, problems and formulae on hydraulics as pertaining to motor fire apparatus in operation and in tests.

This book is strongly commended to those members of fire departments who are interested in the study of motor fire apparatus, whether for their own information or for preparation for promotional examination.

The book is published by the Times-Mirror Printing and Binding House, 118 South Broadway, Los Angeles, Calif., and sells for $7.50.

Highland Falls, N. Y., Acquires Pumper—A 600-gallon American-LaFrance pumper has been delivered to Highland Falls, N. Y.

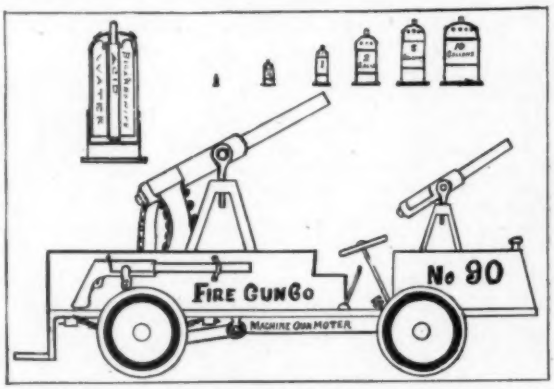
New Form of Fire Extinguishment

Captain Hugh T. Dunn, of Engine Co. 153, 74 Broad St., Stapleton, S. I., New York city, has been granted patent number 687,076 for a form of fire extinguishment which operates on the principle of having cartridges shot to the seat of the fire.

The shells which are to be of various size capacity, consists of two separate shells, one inside of the other. The interior shell may be filled with sulphuric acid and the space in the outer compartment may be filled with bicarbonate soda and water similar to the usual chemical fire extinguisher. For use at electrical fires they may be be filled with carbon tetrachloride. The shells have cartridge caps of various degrees of power so that the shells can be fired through a distance of fifty to two thousand yards. A rod which projects in the cap makes contact with an internal shell.

The smaller size shells are to be made of glass or eathenware while the larger size shells are to be copper and lead. The torpedo is equipped with a supporting plane and a projecting shank to fit into the barrels of the gun for the one to ten gallon size.

The inventor claims that this device will do away with the necessity of laying long hose lines, and will eliminate the time lost in coupling hose. He is attempting to raise capital to market the device.



Arrangement of Gun for Discharging Fire Extinguisher Cartridges and Detail of Cartridge.

Medina, N. Y., Fire Department

Medina, N. Y., is one of the thriving villages in western New York. It has a fire department consisting of Chief Floyd T. Weller and seven paid members, with a call force. The equipment consists of one 300 and one 600-gallon pumper and one city service hook and ladder truck. The 300-gallon apparatus is equipped with two 100-gallon chemical tanks. Chief Weller reports that his department is always ready to afford aid to outside communities when required, for which a charge of $50 is made. This goes into the fire department appropriation. When a call comes from a source not known to the chief, permission to respond is had from the mayor or fire commissioner. Then the response is made by three men accompanied by either chief or assistant, with the necessary apparatus. The call men report at the station and remain until dismissed by the officer in charge. Chief Weller says that this plan works very satisfactorily. He reports that a rural call was recently received from a town five miles away. He made the run with three men and apparatus, laid 1,200 feet of 2½-inch hose and had water on the fire, in just eleven minutes.

Thunderbolt Flames Start Gauze Fire

During the production of "La Vestale" at the Metropolitan Opera House, in New York City, on January 7, flames from the thunderbolt which lights the vestal's altar in the last act set fire to the canvas and gauze which overhang the scenery. The flames coursed down the great tree as usual, but remained glowing above. Several stage hands rushed out in Roman helmets, seized and dragged the burning materials off the stage. Many of the spectators accepted the incident as part of the performance, and little or no commotion was caused in the audience.

Islip, N. Y., to Receive Pumper—The fire department of Islip, N. Y., voted to purchase a Maxim pumper. An appropriation of $13,000 was made last fall to finance the purchase.

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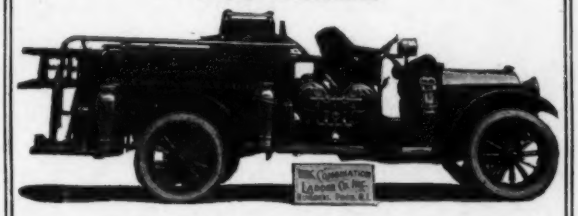

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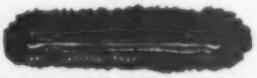

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ADVERTISING INDEX

Advertising Pays—in Fire Engineering

	PAGE
Abrahams & Co.	486
Ahrens-Fox Fire Engine Co.	441
Amdyco Corp.	445
American District Telegraph Co.	477
American Fire Equipment Co.	478
American-LaFrance Fire Engine Co.	473
Anderson Coupling & Fire Supply Co.	486
B. & M. Mfg. Co.	477
Batchelder Co., Fred M.	478
Bi-Lateral Fire Hose Co.	486
Braxmar Co., C. G.	482
Brunssen Co., Geo.	482
Buckeye Iron & Brass Works	477
Buffalo Fire Appliance Corp.	465
C. A. M. Mfg. Co.	473
Clay, Inc., John H.	482
Clifton Mfg. Co.	482
Combination Ladder Co.	485
Darling Valve & Mfg. Co.	469
Decot Machine Works	481
Eastman Co., Samuel	488
Eddy Valve Co.	485
Erick Electric Siren Co.	486
Eureka Fire Hose Mfg. Co.	*Front Cover*
Everson-Ross Co.	474
Fabric Fire Hose Co.	*Back Cover*
Federal Electric Co.	466
Foamite-Childs Corp.	443
Gamewell Co.	446
Garl Signal Co.	442
General Motors Truck Co.	470
Goodrich Rubber Co., B. F.	*Inside Front Cover*
Gibbs-Wahlert Mask Co.	482
Hahn Motor Truck Co.	485
Hale Fire Pump Co.	478
Harrington-Seaberg Corp.	477
Henderson-Ames Co.	482
Henderson & Co.	482
Information for Buyers	**487**
International Harvester Co.	*Inside Back Cover*
Jaeger Portable Power Corp.	485
Kelly-Springfield Tire Co.	462
Kenosha Fire Engine & Truck Co.	485
Lally Fire Appliance Co.	481
Larkin Mfg. Co.	485
Loper Fire Alarm Co.	481
Maxim Motor Co.	481
Mine Safety Appliance Co.	481
Morse & Son, Inc., Andrew J.	486
Northern Fire Apparatus Co.	444
Pirsch & Sons Co., Peter	486
Reed's Sons, Jacob	486
Rensselaer Valve Co.	485
Sanford Motor Truck Co.	481
Seagrave Corp.	461
Schavoir Rubber Co.	481
Schwartz Bros.	481
Selden Truck Corp.	488
Signal Shirt Co.	474
Sterling Siren Fire Alarm Co.	439
Stoughton Wagon Co.	485
Union Water Meter Co.	488
Waterous Fire Engine Works	482
Wilmington Brass Co.	481
Wood & Co., R. D.	488
Woodhouse Mfg. Co.	486
Yellow Truck and Coach Mfg. Co.	470

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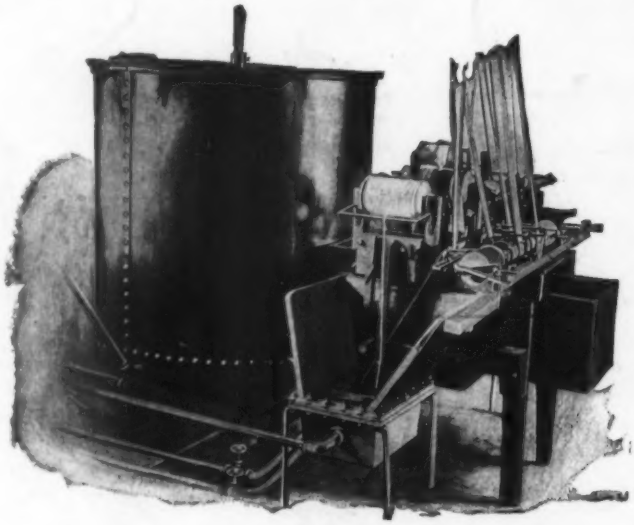

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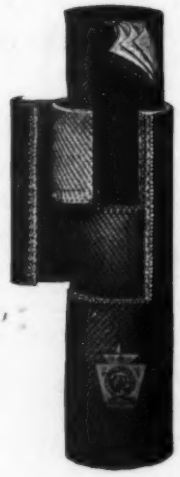

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